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厦门立方幻境科技有限公司
XIAMEN CUBE MAGIC 3D TECHNOLOGY CO.,LTD

MEDICAL METAVERSE



Expert in Comprehensive Solutions for Medical (Metaverse) Virtual Simulation Teaching

MEDICAL (METAVERSE) VIRTUAL SIMULATION TEACHING OVERALL SOLUTION EXPERT

Product Catalog

01

ABOUT US

What is Medical Virtual Simulation 02
Enterprise advantage 03
Enterprise profile 04
Develoment History 05
Honor and qualification 07
Our partner 09

02

HARDWARE PRODUCT PROFOLIO

VR (Virtual Reality) System 12
CAVE: A four-sided integrated, immersive, and interactive teaching system 13
Immersive 3D stereoscopic virtual reality interactive system 14
AR (Augmented Reality) System 15
MR Mixed Reality System – HOLOLENSE 16

03

MIXED VIRTUEL REALITY PROFOLIO

Mixed Virtual Reality Training System 18
Trolley With Mixed Virtual Reality 19
Mixed Virtual Reality Product System 21

04

SOFTWARE PRODUCT PROFOLIO

VSP Human Physiology and Pharmacology Simulator 61

Product Catalog

Management Platform For Theory,Virtual Reality Teaching 63
AI Clinical Thinking Training System 65
Internal medicine 67
Surgery 69
Obstetrics and Gynecology 71
Pediatrics 73
Stomatology 75
Traditional Chinese Medicine 77
Basic Nursing Science 79
Emergency Nursing Care 81
Geriatric nursing 83
Rehabilitation Therapy 85

05

Construction of a Medical Virtual Simulation Training Base

West China Hospital of Sichuan University 89
The First Affiliated Hospital of Soochow University 91
Aksu Second People's Hospital 93
Nanjing University of Traditional Chinese Medicine 95
Quanzhou Medical College 97
Chuxiong Medical College 99
Zhengzhou Health Vocational College 101
Hubei Vocational and Technical College 103
Dali Nursing Vocational College 105
Tianjin Medical College 107
Xinjiang Bazhou Health School 108

01

ABOUT US

WHAT IS MEDICAL MIXED VIRTUAL REALITY 02

ENTERPRISE ADVANTAGES 03

COMPANY INTRODUCTION 04

DEVELOPMENT HISTORY 05

HONOR & QUALITY 07

OUR PARTNERS 09

What is medical virtual simulation

It refers to the creation of a virtual system highly similar to real-world medical scenarios—including clinical teaching, practical training, clinical experiments, and surgical procedures—using virtual simulation technologies such as VR, AR, and MR. This system enables the completion of teaching, training, experimental, and surgical simulations that are impossible in real-world settings.

Addressing the issues in medical education

- Public health safety issues frequently occur in medical education
- Medical knowledge is rapidly updated, and the volume of information increases swiftly.
- The one-to-many teaching approach imposed heavy workload on teachers while yielding poor educational outcomes.
- Insufficient practical training duration for medical students
- The medical teaching process demands substantial teaching resources.
- The traditional medical classroom teaching model is monotonous and makes in-depth understanding difficult.
- Medical teaching resources are unevenly distributed across regions.
- Medical students face tight study schedules and heavy academic loads.
- Traditional case models and standardized case patients often fail to meet teaching requirements.
- Current medical professionals are unable to meet the rapidly growing demand for high-quality healthcare services, compounded by uneven regional distribution.

Advantages of Medical Virtual Simulation Systems

- **Ultra-high fault tolerance**
  All teaching knowledge points and operational steps can be demonstrated and explained repeatedly.
- **Overcoming Time and Space Limitations**
  Perform operations anytime and anywhere as needed, increasing hands-on opportunities
- **Immersive operational experience**
  Reconstruct real-world scenes in the virtual world, immersing the operator in the experience.
- **Efficient Human-Computer Interaction**
  Abstract theories can be presented in the virtual world and interacted with in 360° modes across multiple configurations.
- **Safe and Risk-Free**
  Minimize invasive procedures, mitigate operational risks, protect patient privacy, and avoid ethical and physician-patient disputes.

The technical core of the medical virtual simulation system



AI Natural Speech and Semantic Recognition Dialogue Technology



Automatic registration technology for three-dimensional recognition of graphics and images



Real-time simulation technology for soft tissue deformation and cutting under mechanical stress



Teaching solutions leveraging Internet+, 5G, VR, AR, and MR technologies



Virtual Reality and Technologies Related to the Integration of Virtual and Real Worlds

ENTERPRISE ADVANTAGES

The featured product is the "Metaverse Medical Training System," which integrates multiple technologies including 3D reconstruction and modeling of medical imaging, AR (Augmented Reality), VR (Virtual Reality), MR (Mixed Reality), 3D interactive projection, holographic interaction, large-scale CAVE immersive technology, physiological-driven systems, and virtual-real integration.

Company Profile

Xiamen Cube Magic is a leading provider of comprehensive virtual simulation education services in medical disciplines, dedicated to establishing a metaverse-based medical education system. Leveraging years of expertise and technological advancements, it offers innovative solutions for medical schools and hospitals. Its core product, the "Metaverse Medical Training System," integrates multiple technologies including AR/VR/MR and 3D interactive projection, complemented by the "Virtual-Physical Teaching Management Platform," to create an integrated online-offline experimental teaching model.

A national-level virtual simulation demonstration base for disciplines such as obstetrics and gynecology and nursing has been established, with its products deployed in over 450 academic and hospital institutions. Through collaborations with West China Hospital and the Auckland University of Technology in New Zealand, the company has developed a strategic layout characterized by "domestic focus with international expansion." It has been recognized as a National High-Tech Enterprise and awarded the "Outstanding Enterprise" honor. The company holds CMMI Level 5 certification (accounting for less than 10% globally) and ISO accreditation, along with over 100 patented software copyrights. Its professional team comprises top-tier talents and has consistently maintained a leading position in the industry for decades, contributing significantly to the advancement of medical education.

FOUR SPECIAL SERVICES

Professional Academic Team Support

Possesses comprehensive knowledge in medical disciplines, expertise in AR/VR/MR technologies, and extensive project implementation experience.

An experienced professional team.

The specialist is in charge of the research and development process.

Each project has dedicated pre-sales staff to address client needs, monitor project progress in real time, and resolve any issues for customers.

Collaborative Division of Professional Functi-ons

Teams from multiple departments—including product planning, hardware R&D, software platform development, 3D animation, project implementation, marketing, and 7+24-hour after-sales support—work collaboratively.

Specializing in industry-leading technology

Specializing in the research and development of virtual reality technology, as well as its application in the medical field.

The Four "Major"Advantages



Talent

Possesses professional knowledge in the medical discipline + expertise in AR/VR/MR technologies

Outstanding professionals from various fields, including disciplinary expertise combined with AI intelligence, graphics matching and capt-ure, as well as 3D animation design.



Technology

With over a hundred invention patents and software copyrights, the company boasts leading technological R&D capabilities in the industry.



project >

To date, collaborations have been established with over 450 universities and clinical hospitals both domestically and internationally.



serve >

Provide customers with "four specialized" services.

ABOUT US

Corporate Vision

Be the world's leading technology for medical metaverse education

The company is driving the future of medical education toward digitalization and virtualization.

Corporate Philosophy

The company has always adhered to the philosophy of "unity and innovation, sincere service, and pursuing excellence." It focuses on the research and development of software and hardware for medical virtual simulation experimental teaching and the provision of overall solutions, empowering the flourishing development of medical education at home and abroad.

Team Strength

We have strong teams in management, R&D, and sales, with many ye ars of deep industry experience and advanced planning ideas.

Core Product

The company's flagship product is the "Metaverse Medical Traini ng System," which encompasses multiple technologies including 3D reconstruction and modeling of medical images and graphics.

Corporate Mission

Leading innovation in medical education, contributing to the c ultivation of outstanding medical professionals, and promotin g the sustainable development of medical education.

光谭历程

GUANGHUILICHENG

2014

Initial entrepreneurial phase: Applied for the invention patent of "A Three-Dimensional Interactive Projection Imaging Method." Applied for the invention patent of "A Handheld High-Speed 3D Scanning Imaging All-in-One Device and Its Data Transmission Method."



2015

World's first: Development of the obstetric virtual simulation software (six modules) V1.0, which has been granted two national invention patents.



2016

In collaboration with Quanzhou Medical College, the nation's first virtual reality training center for midwifery was established; the project "Nursing Care for Postpartum Hemorrhage Due to Uterine Atony," jointly developed with Tianjin Medical College, won the first prize in the Information Technology-Based Classroom Teaching Competition for the Higher Vocational Education Group at the National Vocational Information Technology Competition.



2017

In collaboration with the Department of Midwifery at Auckland University of Technology in New Zealand, we have jointly developed the "New Zealand Version of the International Virtual Simulation Training System for Midwifery."



2018

Collaborated with Fujian Medical University to establish a national-level virtual simulation base; won the second prize at the 7th China Innovation Competition (Fujian Region).



2019

It was selected for the first and second batches of the Ministry of Education's Industry-Academia Cooperation Collaborative Education Projects in 2019; and was awarded the title of "High-Quality Government Procurement Supplier".



2020

Obtained the Level 3 Software Capability Maturity Model Integration Certification; awarded the title of "National High-Tech Enterprise"; recognized as a "Xiamen Specialized, Refined, Unique, and Innovative SME" for the period 2020–2022.



2021

It was awarded the 2021 Fujian Provincial Digital Economy "Gazelle" Innovative Enterprise and received the VR/AR Innovation Award at the 2021 World VR Industry Conference Cloud Summit.



2022

Winned the third prize in the Growth Enterprise Group category at the 11th "China Innovation and Entrepreneurship Competition"; the 7th "Maker China" SME Innovation and Entrepreneurship Competition (Xiamen Division); and the 8th "Egret Star" Innovation and Entrepreneurship Competition; selected for the Fujian Science and Technology Little Giant Enterprise List; and included in the 2022 Yuanzhi Universe Annual Honor List for Innovative Applications.



2023

Obtained certifications for the "Information Security Management System" and "Information Technology Service Management System"; recognized as a 2023 Fujian Digital Economy Core Industry "Gazelle" Innovative Enterprise; assisted Hubei Vocational and Technical College in establishing a school-enterprise collaborative workstation for the development of virtual simulation-based nursing vocational education resources; awarded the Metaverse Innovation Application (Healthcare) Prize.



2024

Chen Qiang's team has pioneered innovation in medical education through virtual simulation technology, making its debut in the Wushi Live Studio; it was selected as one of Xiamen's Key Enterprises for Future Industries and awarded the Third Prize in the Growth Enterprise Category at the 10th "Egret Star" Innovation and Entrepreneurship Competition.



2025

Cubic Illusion was awarded the "Outstanding Contribution Award" at the 2025 Belt and Road Initiative & BRICS Skills Development and Technological Innovation Competition, as well as the Second Nursing Comprehensive Technology - Virtual-Real Integration Innovation Application Competition and the First Rehabilitation Assessment and Treatment Virtual-Real Integration Skills Competition.

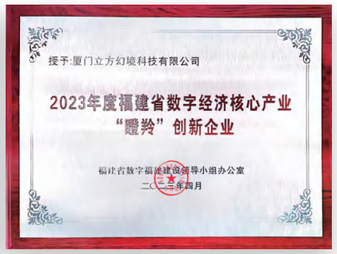


HONOR QUALIFICATIONS

Since its establishment in 2017, the company has leveraged years of deep expertise and cutting-edge technology to deliver innovative medical (metaverse) virtual simulation education solutions for medical schools and hospitals, earning widespread recognition and acclaim in the industry. It holds numerous prestigious titles, including National High-Tech Enterprise, Fujian Province's "Gazelle" Innovative Enterprise in the Data Economy sector, one of the Top 50 Service Quality Enterprises in Fujian's Government Procurement IT Services Industry, a participant in Xiamen's "Double Hundred" Plan, a Xiamen Specialized, Refined, and Innovative SME, a Fujian Provincial Science and Technology Little Giant Enterprise, CMMI Level 5 certification (Capability Maturity Model Integration), Xiamen's Most Growth-Oriented SME, and an AAA-rated credit enterprise.

Meanwhile, the company has accumulated over 100 patents and software copyrights, serving more than 450 universities and clinical hospitals worldwide. It stands as a leading provider in the field of comprehensive medical virtual simulation education and has consistently achieved outstanding results in various innovation competitions.











40+

ENTERPRISE HONOR



- In 2022, Cubic Illusion was awarded the "AAA-Level Credit Enterprise Title".
- In 2022, Cubic Illusion received the "Level 5 Capability Maturity Model Integration Certification (CMMI 5)".
- In 2023, Cubic Illusion was awarded the "High-Tech Enterprise Certificate".
- In 2023, Cubic Illusion was awarded the "Specialized, Refined, Unique, and Innovative SME Certificate".
- In 2023, Cubic Illusion was awarded the "Information Technology Service Management System Certification Certificate".
- In 2023, Cubic Illusion was awarded the "2023 Fujian Provincial Digital Economy Core Industry 'Gazelle' Innovative Enterprise Certificate".
- In 2024, Cubic Illusion was included in the "Xiamen Future Industry Key Enterprises List".
- In 2024, Cubic Illusion was awarded the Third Prize at the 9th "Maker China" event during the 10th Egret Star Awards and the 13th "China Innovation and Entrepreneurship Competition" (Xiamen Division).
- In 2025, Cubic Illusion was awarded the "Outstanding Contribution Award" at the 2025 Belt and Road BRICS Skills Development and Technological Innovation Competition, the Second Nursing Comprehensive Technology Virtual-Real Integration Innovation Application Competition, and the First Rehabilitation Assessment and Treatment Virtual-Real Integration Skills Competition.

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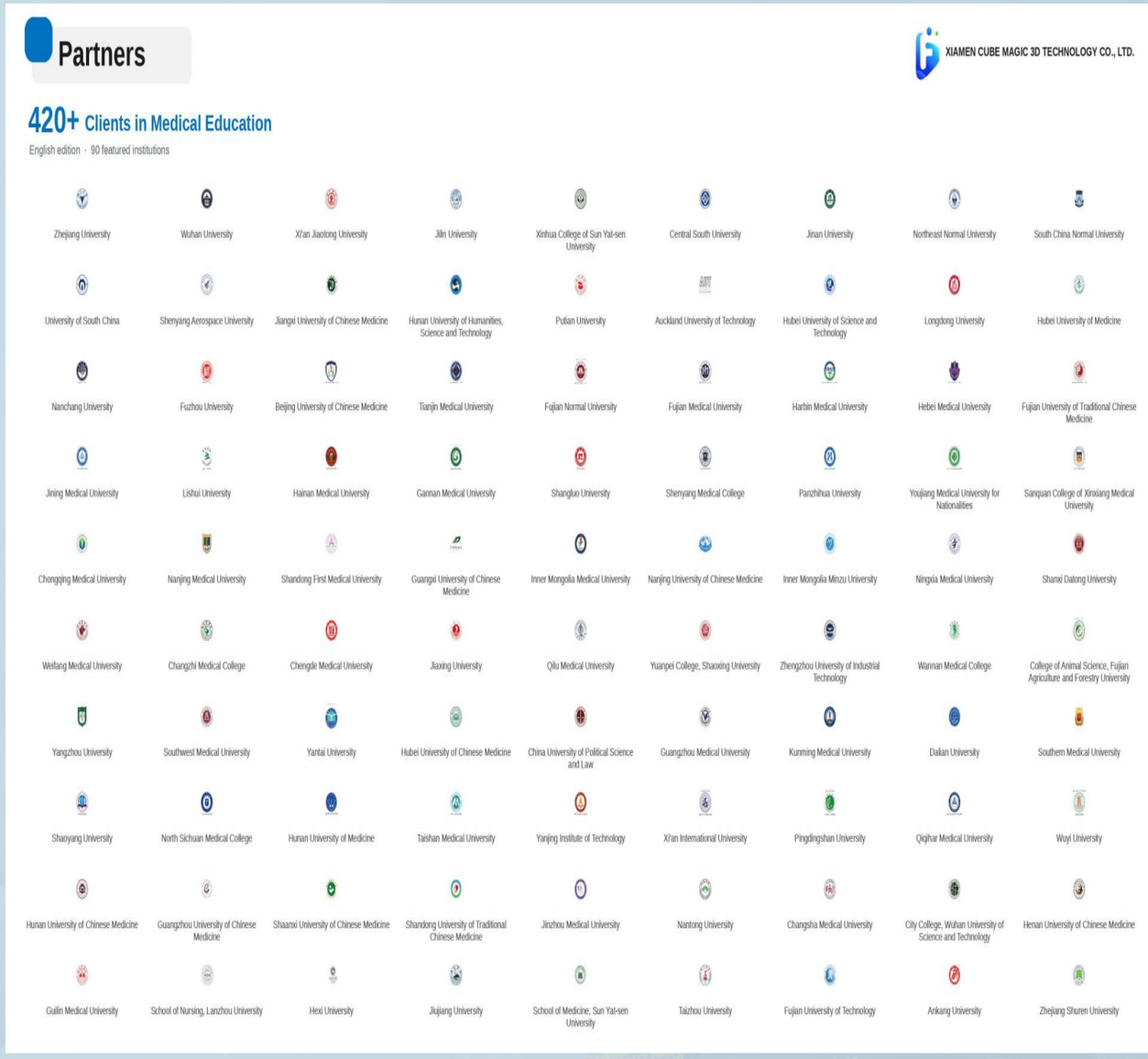


COOPERATIVE PARTNER

100+
Alll region acros the country

WIN-WIN COOPERATION - AND BENEFITS





02

HARDWARE PRODUCT PROFOLIO

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AR (Augmented Reality) System 15

MR Mixed Reality System - HOLOLENSE 16

VR (Virtual Reality) Practical Training System

VR (Virtual Reality) technology refers to a simulation system that utilizes computer technology to create and experience simulated real-world scenarios, enabling users to immerse themselves in these environments and interact with them.

- In the Cube Illusion VR medical virtual reality system, all medical scenarios and operational actions can be interactively manipulated by the operator. The system employs computer graphics to simulate perspective blind spots that traditional mannequins cannot display, presenting them in real-time through multiple viewpoints such as perspective and sectional views. This approach makes operations more aligned with actual clinical protocols, enabling students and healthcare professionals to better understand and master the techniques during classroom instruction and practical training, while allowing instructors and supervisors to more effectively address challenging concepts and difficulties during teaching sessions.
- The system offers two modes: single-user VR and multi-user VR.
- The VR virtual system can simulate and create realistic clinical/extreme environments, enabling training in predefined virtual scenarios with immersive interaction, thereby enhancing learning experience through寓教于乐 (education through entertainment).
- Systematic learning: The software is developed in accordance with clinical operational workflows.
- Advanced Operations: The controller simulates ten-finger interaction, allowing students to perform precise operations in predefined scenarios.
- 3D six-degree-of-freedom functionality: Students can enjoy a 720° panoramic view within the scene and share perspectives collaboratively with multiple users.
- AI Voice Communication: permite voice interaction with virtual patients, enabling immersive training, instructor-guided practice, and repeated learning for students.

Single-user VR

It can be used for students to gain hands-on experience after teacher demonstrations, allowing them to operate within immersive virtual environments as if they were in actual medical practice settings.



Multi-user VR Collaboration

The system supports coordinated operations involving three or more participants. Within the same scenario, operators can simulate different roles to perform tasks collaboratively, thereby enhancing students' teamwork skills.

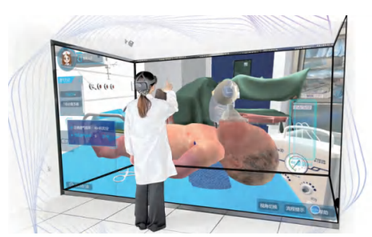


CAVE Intefration on four sides Immersive, Interactive Teaching System



The CAVE system consists of four 3D screens, creating a fully immersive virtual environment. Users immerse themselves in the virtual simulation scene enveloped by stereoscopic projections and, through interactive devices such as data gloves and VR headsets, experience a highly immersive sensation. The system is compatible with CAVE virtual simulation software across various disciplines and, when combined with virtual simulation hardware, enables immersive simulation operations that blend the virtual and the real. LED high-refresh-rate stereoscopic displays create four virtual immersive spaces—the front, left, right, and floor—and, when paired with a motion capture system, facilitate interactive classroom engagement between teachers and students. Additionally, students wearing 3D glasses can enjoy an authentic immersive experience.

The system supports immersive virtual environment interactive teaching and demonstration, providing users with extensive coverage, wide field of view, high resolution, and high-quality imagery. Additionally, it enables the coordinated use of interactive devices tailored to diverse user requirements, delivering tailored visual experiences.



The system boasts extensive application scope, strong immersion, and excellent interactivity; it is frequently employed in teaching to simulate various extreme scenarios—such as surgical procedures and disaster scenes—for instructional and training purposes. This approach effectively cultivates students' clinical competence and serves as a powerful tool for nurturing high-caliber professionals.

Immersive 3D stereoscopic virtual reality interact-ive system



Product Profolio

- High-resolution, high-quality stereoscopic imaging
- It is equipped with 24 miniature sensor units.
- Supports 3D video input with a 120Hz refresh rate



Product feature

It features a curved 3D LED ultra-wide screen, supporting multi-user viewing and interactive operations. Students can interact by wearing 3D glasses. Integrated with motion capture technology, virtual objects follow the user's field of view and allow for interactive interaction.

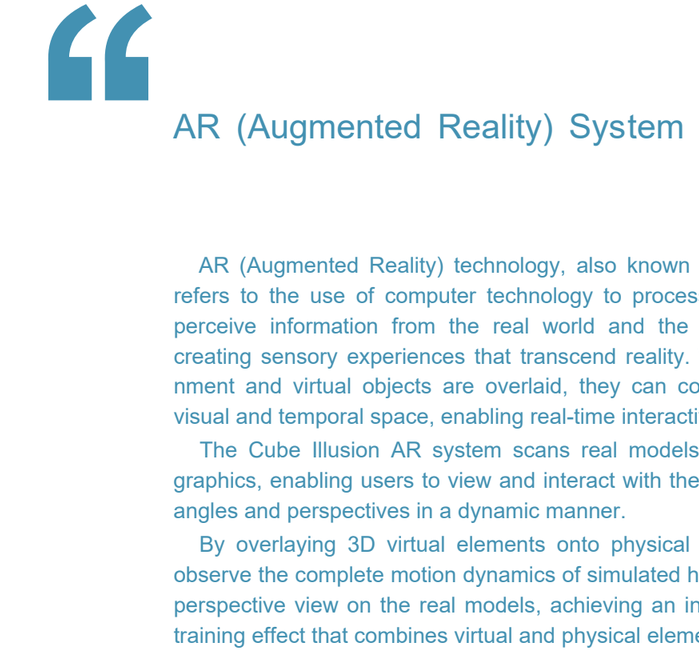
The system primarily consists of hardware components such as an arc-shaped 3D LED ultra-wide screen, a 3D controller, a motion capture unit (including a head tracker, a high-precision gesture tracker, high-precision laser motion capture cameras, and motion capture tracking system softwa-re), and other accessories (3D glasses, a 3D glasses sterilization cabinet, and a 3D glasses charging station). Additionally, the system should support a wide range of medical-related virtual simulation software and mixed reality models capable of operating within its framework.

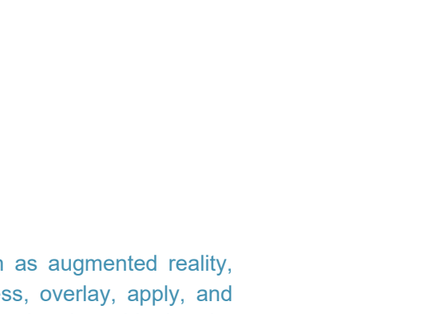
AR (Augmented Reality) System

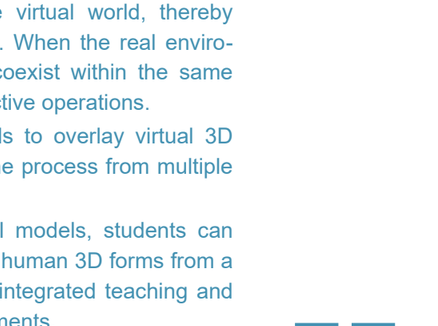
AR (Augmented Reality) technology, also known as augmented reality, refers to the use of computer technology to process, overlay, apply, and perceive information from the real world and the virtual world, thereby creating sensory experiences that transcend reality. When the real environment and virtual objects are overlaid, they can coexist within the same visual and temporal space, enabling real-time interactive operations.

The Cube Illusion AR system scans real models to overlay virtual 3D graphics, enabling users to view and interact with the process from multiple angles and perspectives in a dynamic manner.

By overlaying 3D virtual elements onto physical models, students can observe the complete motion dynamics of simulated human 3D forms from a perspective view on the real models, achieving an integrated teaching and training effect that combines virtual and physical elements.









MR MIXED REALITY SYSTEM - HOLOLENSE

MR Mixed Reality System – HOLOLENSE

Mixed Reality (MR) (including Augmented Reality and Augmented Virtuality) refers to a novel visual environment created by integrating the real and virtual worlds. It combines virtual and real elements and operates in real-time within a virtual three-dimensional space. The Cube Illusion MR mixed reality system leverages the advantages of both augmented reality and augmented virtuality, overlaying real-world objects with virtual medical images to generate innovative visual medical scenarios.

Medical imaging data can be directly imported into the system to simulate a realistic clinical medical case environment. Through the MR headset, intuitive visualization is achieved, and various operational details of the case can be manipulated via the operator's fingers. This enables the construction of authentic scenarios, case simulation, and applications in fields such as medical education and experimental research.

03

MIXED VIRTUALREAITY PRODUCT SYSTEM

MIXED VIRTUALREAITY PRODUCT SYSTEM TRAINING SYSTEM 18

MACHINE TROLLEY WITH MIXED VIRTUAL REALITY 19

MIXED VIRTUAL-REAL COMBINATION PRODUCT PROFOLIO 21



Product Profolio

Mixed Virtual Reality Training System is a medical education platform that integrates multiple technologies. Its core features include: advanced sensors, real-time data analysis and feedback, highly realistic simulation of positive clinical signs, interactive learning experiences, personalized learning pathways, and an objective evaluation system. The system enables simulation of complex clinical scenarios, supports diverse educational applications, and allows for continuous updates and upgrades.

Product Characteristic

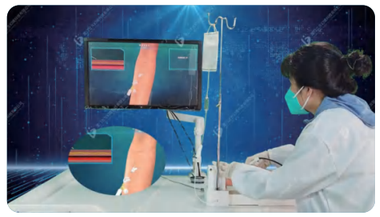
01 **Real-time data analysis and feedback** During operation, the intelligent system can quickly analyze the operations and provide instant feedback.

02 **Highly realistic positive signs** The hybrid training system combines virtual and real elements to demonstrate complex signs, providing an experience close to reality.

03 **Guidelines for Operational Standards** During operation, the system's display methods such as force levels can remind operators of proper operational standards.

04 **Interactive Learning Experience** During the operation process, students can communicate with the simulation person, enhancing interactivity and improving learning ability.

Product Application Demonstration



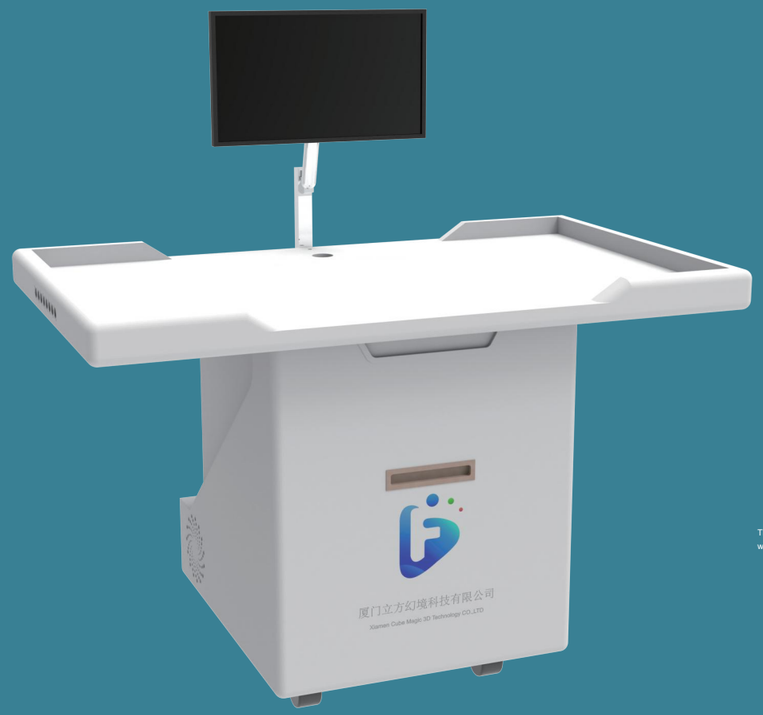




Integrated machine trolley combining both virtual and physical components

Product Application

The hybrid virtual-real vehicle offers seamless mobility with unrestricted mobility, enabling rapid deployment of immersive virtual and real-world scenarios anytime, anywhere. Its personalized customization features allow flexible matching of interactive modules and content to precisely meet diverse needs such as teaching, exhibition, and experiential applications.



Highly portable

Wide range of applicable scenarios

The seamless integration of virtual and physical elements ensures a smooth experience, while its user-friendly operation and maintenance offer hassle-free management.



Portable and Mobile> Features silent four wheels for easy relocation and placement. When moving

No noise disrupts classroom order.

01

Simplicity and elegance>

The overall design is simple and elegant, featuring a white color scheme without any conspicuous mechanical structures, making it suitable for clean environments such as standardized laboratories and practical training classrooms in medical and nursing colleges.

02

03

High-Performance Simulation Support> A six-core processor with professional-grade graphics memory, perfectly tailored for medical applications

The high-definition and highly interactive requirements of medical virtual reality software accurately replicate clinical operational scenarios, enhancing the skill development of medical students.

Practical Training and Assessment.

04

High processor and memory>

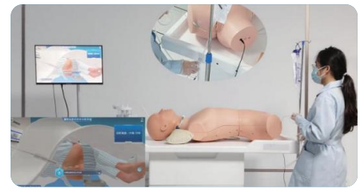
Equipped with a 3GHz six-core processor and 16GB DDR4 memory, it boasts robust multitasking capabilities, enabling smooth operation of multi-module medical virtual simulation systems.



gastrolavage



Arterial blood sampling



clyster

A product that combines both tangible and intangible

product presentation

The integration of virtual and real elements combines virtual simulation software with physical models and scenarios to create a clinical procedure th

It also predefines key medical knowledge points and clinical operational standards. Users can experience authentic clinical procedures

The simulated environment exhibits high authenticity comparable to the real world. The integrated hardware design, combined with professional virtual

Various usage scenarios such as instructional demonstrations, demonstrations, presentations, and teaching exercises.



- Basic Nursing Science Comprehensive Catheterization Training System; Critical Care Patient Enteral Nutrition Training System; Integrated Real-Virtual Training System for Nursing Comprehensive Puncture; Nasogastric Feeding Real-Virtual Training System; Sputum Aspiration Real-Virtual Training System; Enema Real-Virtual Training System; Gastric Lavage Real-Virtual Training System; Insulin Injection Real-Virtual System; AI Real-Time Drug Identification Module; Female Catheterization Real-Virtual Training System; Male Catheterization Real-Virtual Training System; Intravenous Infusion Real-Virtual Teaching System; Arterial Blood Sampling Real-Virtual Training System; Intramuscular Injection Real-Virtual Teaching System; Subcutaneous Injection Real-Virtual Training System

  Intradermal Injection Training System Combining Real and Virtual Elements

  Comprehensive intravenous puncture teaching system integrating virtual and real training; multifunctional simulated human training system combining virtual and real scenarios; intravenous catheter placement training system integrating virtual and real elements; closed-system intravenous blood transfusion training system combining virtual and real components

- Emergency Nursing-Airway Management Training System (combining virtual and real training) -Multi-role Collaborative System for In-Hospital Trauma Emergency Care -Comprehensive Emergency Training System (virtual-real integration) -Multi-scenario Training System

  Cardiopulmonary Resuscitation Training System Combining Real and Virtual Elements (One-to-Six) – Comprehensive Emergency Care Training System Integrating Real and Virtual Components

  Advanced Life Support Simulation Training System

  Holographic Integrated Emergency Care Training System (combining virtual and real elements); Comprehensive Emergency Nursing Training System (combining virtual and real elements); Mechanical Ventilator Simulation Training System (combining virtual and real elements)

- Internal Medicine Comprehensive Puncture Training System: Combined Real and Virtual Training for Abdominal Puncture

- Clinical Medicine Cardiopulmonary Auscultation Training System Combining Deficiency and Excess Principles Laparoscopic Simulation Trainer

- Rehabilitation Therapy

  Postpartum rehabilitation training system integrating tonification and deficiency; Muscle tone training system combining tonification and deficiency; Respiratory exercise training system integrating tonification and deficiency; Postpartum rehabilitation training system combining tonification and deficiency; Joint mobilization technique training system integrating tonification and deficiency; Comprehensive rehabilitation assessment training system combining tonification and deficiency

  Wearable device for real-time feedback of upper limb rehabilitation training in stroke patients

  Wearable device with real-time feedback system for upper limb functional training in postoperative breast cancer patients

- Infectious Diseases Virtual-Real Combined System for Pharyngeal Swab Collection

- gynecotokology

  Natural Delivery Training System Combining Realistic and Virtual Elements; Intelligent Simulation Model for Postpartum Hemorrhage; Comprehensive Intelligent Delivery Robot for Parturients; Fetal Heart Rate Monitor Simulator

  Gynecological examination system combining deficiency and excess assessment; Vaginal examination training system integrating deficiency and excess evaluation; Obstetric uterine massage force feedback training system

  Doppler Fetal Heart Monitoring Training System Combining Virtual and Real Techniques; Four-Step Palpation and Fetal Heart Auscultation Training System Combining Virtual and Real Techniques; Transvaginal Posterior Fornix Puncture Training System Combining Virtual and Real Techniques

- Traditional Chinese Medicine

  System for Training the Integration of Acupoints and Acupuncture in the Whole Body: A Traditional Chinese Medicine Moxibustion System Combining Deficiency and Excess Principles

  Traditional Chinese Medicine Massage System Combining Deficiency and Excess; System for Training in Combining Deficiency and Excess through Gua Sha

  Mongolian Medicine Triangular Needle Acupuncture Therapy for the Kneecap Point: A Training System Combining Deficiency and Excess Principles Mongolian Medicine Warm Needle Acupuncture Therapy for the Hip Point: A Training System Combining Deficiency and Excess Principles Ear Acupoint Seed Burial Therapy: A Training System Combining Deficiency and Excess Principles

  Whole-body Acupuncture Training System Combining Deficiency and Excess Principles; Traditional Chinese Medicine Pulse Diagnosis Training Device

  Traditional Chinese Medicine Acupuncture and Moxibustion Force Feedback Training System Combining Deficiency and Excess Principles

- pediatrics

  Neonatal Emergency Resuscitation Training System Combining Real and Virtual Elements; Pediatric Drowning Prevention Training System Combining Real and Virtual Elements

  Emulsion Preparation System; Virtual-Real Integrated Operating System; Infant Audio-Visual Virtual-Real Integrated Training System; Neonatal Umbilical Cord Management System; Virtual-Real Integrated System; Infant Feeding Virtual-Real Integrated Training System; Neonatal Touch Therapy System; Virtual-Real Integrated System; Pediatric Seizure Management Training System; Children's Comprehensive Emergency Virtual-Real Integrated Training System

  Neonatal Gastrointestinal Decompression Training System Combining Real and Virtual Elements; Pediatric Scalp Acupuncture and Venous Puncture Training System Combining Real and Virtual Elements

  Infant and toddler acute respiratory foreign body obstruction training system combining both deficiency and excess patterns

- geriatric nursing

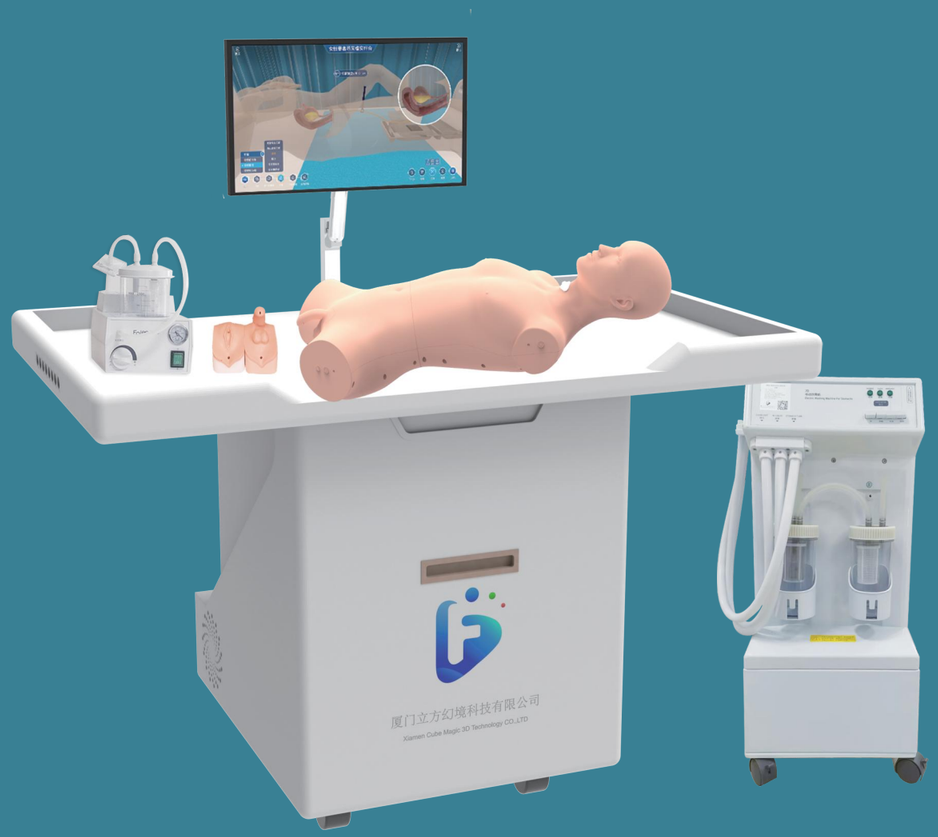
  Geriatric Heimlich Manoeuvre Combined Training System; Combined Training System for Elderly Artificial Defecation; Combined Training System for Elderly Pressure Ulcer Prevention; Combined Training System for Elderly Aging Experience; Combined Training System for Elderly Fall Prevention

- Medical Aesthetics

  Meridian Facial Acupoint Massage Training System: A Combined Training System for Real and Virtual Elements in Medical Aesthetic Technology

- Surgery

  Closed Thoracic Drainage Teaching System Combining Theoretical and Practical Elements

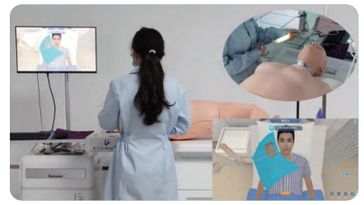


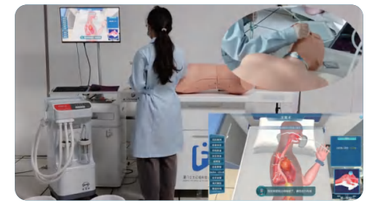
Integrated Tubing Management Training System Combining Virtual and Real Elements

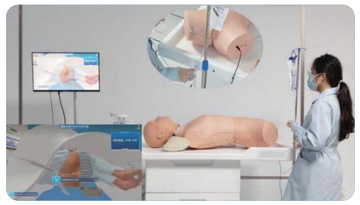
product presentation

The Integrated Virtual-Real Combined Catheterization Training System is an intelligent teaching and training simulator that integrates virtual and real-world technologies. The system simulates various tactile sensations and patient physiological responses during clinical procedures, providing intelligent detection and feedback through virtual simulation and smart sensing technologies. It encompasses intelligent training for eight major clinical skills: nasogastric feeding, sputum suction, gastric lavage, enema, male urinary catheterization, female urinary catheterization, triple-lumen double-cyst catheterization, and gastrointestinal decompression. The simulator is manufactured from polymer silicone material, offering realistic external features and tactile characteristics. The system supports speech recognition and interaction, while displaying real-time changes during procedural execution. Internal structures are visualized in both fluoroscopic and sectional views, with smart sensing chips monitoring catheter insertion length and speed while providing force feedback to simulate tactile sensations. By combining virtual technology with practical operations, the Integrated Virtual-Real Combined Catheterization Training System delivers comprehensive skill training and hands-on experience for medical students and nursing interns.

Module Introduction and Demonstration

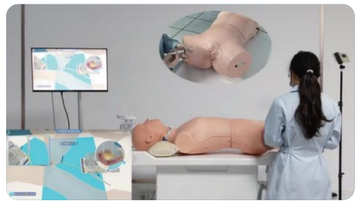

nasal feeding

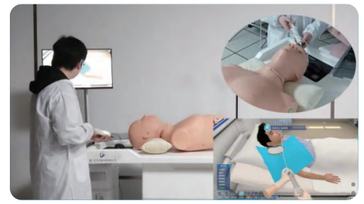

gastrolavage


clyster

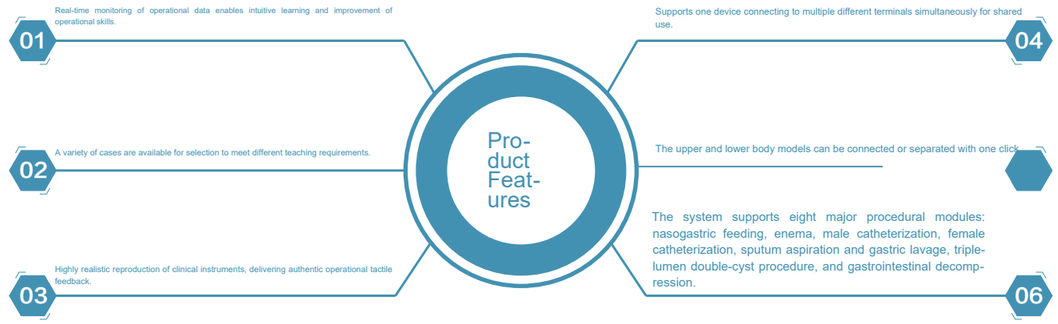

Male Catheterization


Three-chamber two-cyst hemostasis technique


Female Catheterization Procedure


gastrointestinal decompression


Suction Therapy





critically ill patient

Enteral Nutrition Deficiency-Excess Combined Training System

Normal delivery

Real-Imaginary Combined Training System



Product Introduction and Display

The Critical Care Patient Enteral Nutrition Deficiency-Excess Integration Training System is an innovative teaching tool that combines virtual reality and force feedback technology, specifically designed for enteral nutrition management in critically ill patients. Utilizing high-precision silicone human simulators and intelligent sensors, the system provides realistic physiological feedback and tactile feedback during operation, supporting simulations of various clinical scenarios. It features advanced functionalities such as autonomous respiration, oral anatomy visualization, and nasal cavity status monitoring, with real-time visualization of internal structural changes through fluoroscopic and sectional viewing modes. The system supports three operational modes—learning, training, and assessment—and integrates a mobile evaluation system to deliver objective quantitative scoring and post-training review capabilities. It is suitable for academic teaching and pre-clinical skills training, enabling learners to rapidly master key competencies in enteral nutrition management.



Automatic mouth opening and closing



Test for gastric juice



Place the stethoscope



Adjust the nutrient pump

Product Features

01 The system software supports six distinct fetal orientations: left anterior occiput, right anterior occiput, left transverse occiput, right transverse occiput, left posterior occiput, and right posterior occiput. Upon configuration, the fetal model automatically switches to the corresponding orientation.

02 The system supports wireless connectivity not only for PCs but also for tablets and smartphones. Through a mobile app, users can access a 3D hybrid virtual reality software and interactively operate with a comprehensive simulated delivery model for pregnant women.

03 When the fetal position during the second stage of labor is occiput posterior or occiput transverse, manual fetal head rotation should be performed. The operator must insert their hand into the simulated human body of the pregnant woman and precisely manually adjust the fetal head to the correct position.

The system employs AI technology to monitor the perineal disinfection process in real time. During disinfection, it evaluates the student's disinfection performance, identifies common errors, and provides immediate corrective feedback.

Product Features

01 Thoracic cavity simulation: The simulated human thoracic cavity can achieve automatic起伏.

02 Tongue retraction simulation: This allows for the simulation of airway obstruction caused by tongue retraction.

03 Automatic mouth opening and closing: The simulated mouth can automatically open and close.

04 Tracheal misinsertion feedback: Insertion into the trachea provides visual feedback through the formation of a water blister during the water cup test.

05 Cyanosis simulation: During endotracheal insertion, the face appears cyanotic with purple lips, simulating hypoxic symptoms.

06 Pupil constriction simulation: The eye pupil exhibits a light reflex response, evaluating the operator's ability to interpret the light reflex test.

Product Introduction and Display

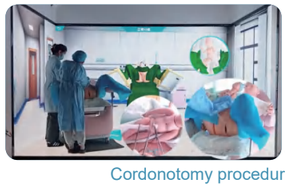
The Normal Delivery Virtual-Real Integration Training System is a training system that employs a hybrid virtual-real approach to accurately simulate the actual clinical process of normal delivery. The system integrates practice modes with assessment modes, featuring automated scoring for evaluation content. Operators can freely adjust the delivery transparency within the 3D virtual simulation software, while the fetus automatically performs descent, rotation, flexion, and extension movements according to predefined delivery mechanisms. This product has also been designated as the official competition equipment for the finals of two editions of the "Normal Delivery Delivery Skills Competition."



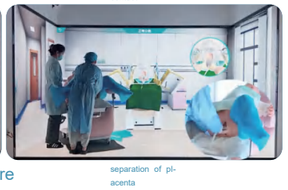
Fetal disengagement



Maternal-infant contact



Cordonotomy procedure



separation of placenta



Neonatal Emergency Resuscitation Training System Combining Real and Virtual Elements

System for Training the Integration of Acupoints and Acupuncture Techniques Based on the Concept of "Deficiency and Excess" Throughout the Body



Product Introduction and Display

The Neonatal Emergency Resuscitation Hybrid Training System is a virtual-real integrated training system designed for teaching neonatal cardiopulmonary resuscitation (CPR) skills. By connecting a mannequin with a computer, it transmits real-time data and analyzes operational effectiveness to achieve a hybrid training experience. Learners can perform various techniques—including positioning, percussion stimulation, positive pressure ventilation with airbags, and chest compressions—on simulated infants, utilizing observation modes such as free perspective, dual perspectives, perspective view, and sectional view. This system significantly enhances practitioners' pediatric emergency response skills.



Correct posture



Insert the laryngoscope



positive airway pressure



external chest compression

Pro-duct Feat-ures

01 Correct positioning and airway patency: Perform proper positioning and airway patency procedures on the neonatal manikin. If these procedures are incorrect, positive pressure ventilation cannot be administered properly.

02 When performed correctly after neonatal resuscitation, the neonatal simulator will breathe spontaneously and generate an automatic pulse, with its chest rising and falling automatically. The pulse can be felt by touching the simulator's arms.

03 Laryngoscope insertion and withdrawal: Perform the procedures of laryngoscope insertion and withdrawal on a neonatal mannequin. Combine three-dimensional simulation with real-time interactive visualization to demonstrate these procedures. The dynamic process of a specific location.

04 Positive pressure ventilation: Perform positive pressure ventilation on the neonatal mannequin

The operation combines 3D simulation with real-time interactive display of the dynamic process of chest起伏 and airbag changes.

05 Tracheal intubation: Perform tracheal intubation procedures on neonatal manikins, combined with 3D simulation for real-time interactive visualization of the dynamic process of intubation placement. Real-time dynamic images of the laryngeal cavity can be observed, with clear visualization of internal anatomical structures (e.g., tongue, epiglottis cartilage, tracheal orifice, esophageal orifice, etc.).

Pro-duct Feat-ures

01 It contains over 600 acupoints on the human body, enabling hardware operations and software to simultaneously locate the corresponding positions.

02 When administering an injection on a simulated human model, the corresponding acupoint is indicated by a light, and the corresponding acupoint in the 3D virtual simulation software is also highlighted.

Example: When selecting acupoints in virtual software, the model displays...

The corresponding acupoints will also light up simultaneously.

Equipped with an advanced multifunctional cart that eliminates manual adjustments.

The posture can automatically switch between supine and pro[illegible]tions, meeting the needs of needle insertion in different pos[illegible]

04 Connect multiple pins simultaneously; no limit on the number. Multiple users can connect at the same time.

Perform needle insertion; the 3D virtual software displays real-time synchroniz[illegible]

05 The puncture procedure intelligently and in real-time identifies the position and insertion depth of acupuncture needles; insertion into superficial acupoints is indicated by green color.

The identifier: A red marker appears when inserted into deep acupoints.

The system determines the position based on the insertion location within a 10 cm radius.

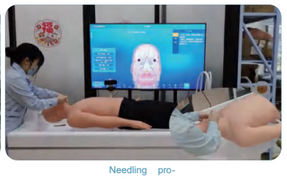
06 The image displays the anatomical structure at the layered local perspective insertion sites of acupuncture needles. For critical acupoints, the system will trigger an alarm if the needle is inserted too forcefully or excessively deep.

Product Introduction and Display

The Whole-Body Acupoint and Acupuncture Training System Combining Virtual and Real Environment is a Traditional Chinese Medicine (TCM) acupuncture teaching device that integrates virtual reality and artificial intelligence technologies. It features a highly realistic human-like model equipped with over 600 acupoints and high-precision sensors, enabling accurate identification of acupuncture points and depth. The system supports simultaneous operation by multiple users with real-time synchronization of hardware and software data. The software comprises teacher, student, and visitor interfaces, offering functionalities such as student management, disease symptom editing, assessment administration, and score viewing. The student interface provides various learning modes—including practice sessions, exercises, and assessments—with comprehensive content covering human model visualization, meridian pathways, and acupuncture technique instruction. The system is further enhanced by a advanced multifunctional cart capable of automatic posture adjustment to meet diverse teaching requirements. By integrating virtual and real environments, this system effectively enhances students' clinical reasoning and acupuncture operational skills, serving as an efficient tool for TCM acupuncture education and training.



Position reversal



Needling procedure



Intelligent Consultation



Multiple needle injections



Airway Management Training System Combining Real and Virtual Elements

postpartum hemorrhage

Intelligent simulation mannequin



Product Introduction and Display

The Airway Management Virtual-Real Integrated Training System is an advanced, interactive, virtual-real combined training system for endotracheal intubation via the mouth, accurately simulating the clinical procedures of true endotracheal intubation: pre-intubation preparation, pre-intubation assessment, the intubation process, and post-intubation confirmation. The "virtual" aspect refers to the system's ability to simulate certain clinical operational environments—including patient history, physician-patient communication, and operating room/ward scenarios—with the aid of a virtual 3D anatomical model to facilitate anatomical learning during intubation. The "real" aspect indicates that the system allows users to perform procedures—such as mask oxygen delivery, laryngoscope insertion, and catheter placement—within the simulated environment, similar to traditional training models. Real-time guidance is provided during operations to enhance students' technical skills, laying a solid foundation for their future clinical practice.



Laryngeal displacement

Edema of the tongue



gnathospasmus



Airway width adjustment

Pro-duct Feat-ures

01 Laryngeal spasm: The normal airway obstruction is adjusted to complete airway obstruction to simulate sudden vocal cord closure.

02 Laryngeal displacement: This maneuver allows the larynx to be moved to a more anterior position, thereby increasing the difficulty of vocal cord visualization.

03 Tongue edema: Induce tongue swelling to simulate varying degrees of vascular edema of the tongue.

04 Maxillary clenching: This condition severely restricts mouth opening, making the insertion of airway devices more challenging.

05 Maxillary protrusion/retraction: Enables varying degrees of occlusal malalignment, simulating overjet and crossbite characteristics.

Pro-duct Feat-ures

01 The authentic clinical bleeding simulation allows for precise adjustment of bleeding rate and volume.

02 After connecting the simulated urine collection bag, simulate simultaneous urine flow into collect the urine.

The height at which the urine bag light illuminates simulates the urine volume levels corresponding to different physiological processes.

03 Perform intelligent position judgment and force analysis for the implemented bilateral hand compression massage and combined abdominal wall-vaginal compression.

04 The inflation process of the intrauterine balloon is associated with a significant reduction in bleeding volume.

Synchronous presentation.

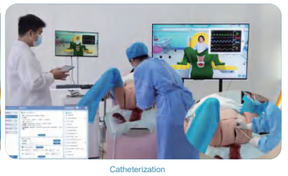
Product Introduction and Display

The system can simulate realistic and controllable postpartum hemorrhage scenarios, precisely regulate bleeding rate and volume, and intelligently detect signs of placental separation. Equipped with a high-precision tactile sensing matrix, the system automatically identifies the optimal positions for manual compression massage and combined abdominal-vaginal compression while analyzing force application, providing real-time visual feedback data. When the uterine balloon is inflated, it simultaneously demonstrates a significant reduction in blood volume, intuitively illustrating the efficacy of interventional hemostasis.

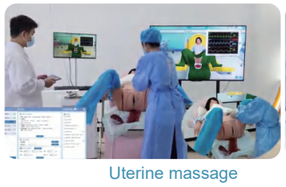
Furthermore, this system serves as the official competition equipment for the Midwifery Track at the "5th Academic Annual Conference and Simulated Medical Innovation Competition," with its professionalism and authority widely recognized within the industry. Elite midwives from major hospitals can enhance their diagnostic, decision-making, and operational skills through highly realistic simulations of postpartum hemorrhage emergencies. By leveraging competition-driven learning and practice-based training, the system facilitates the standardization and innovation of midwifery techniques, thereby advancing maternal and infant safety.



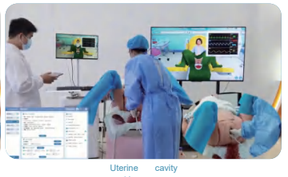
Placenta removal



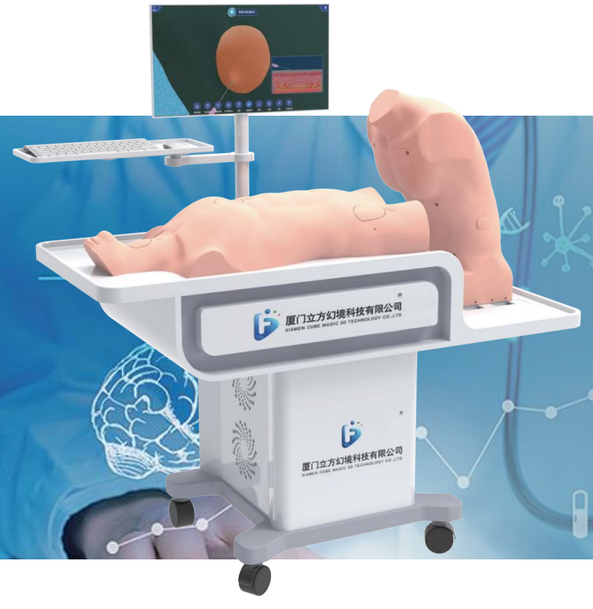
Catheterization Procedure



Uterine massage



Uterine cavity packing



Comprehensive Puncture Training System Combining Real and Virtual Training Elements

Comprehensiv Nursing Puncture

Real-Imaginar Combine Training System



Product Introduction and Display

The Integrated Virtual-Real Combined Puncture Training System utilizes virtual-real integration technology and force feedback technology to simulate authentic puncture environments and procedural steps. It offers various puncture models representing different human body anatomical sites, with peripheral instruments synchronously simulating the puncture process in real-time while providing realistic force feedback. The comprehensive puncture workflow is designed to serve as a training and assessment tool for medical school nursing students and hospital interns prior to clinical practice. Developed through advanced virtual-real integration and force feedback technologies, the system consists of two components: peripheral instrument simulation (including a puncture simulation mannequin and puncture/anesthesia needle plugins) and a 3D virtual-real combined puncture training software. The system provides four training modules: thoracentesis, paracentesis, lumbar puncture, and bone marrow aspiration.



Lumbar puncture

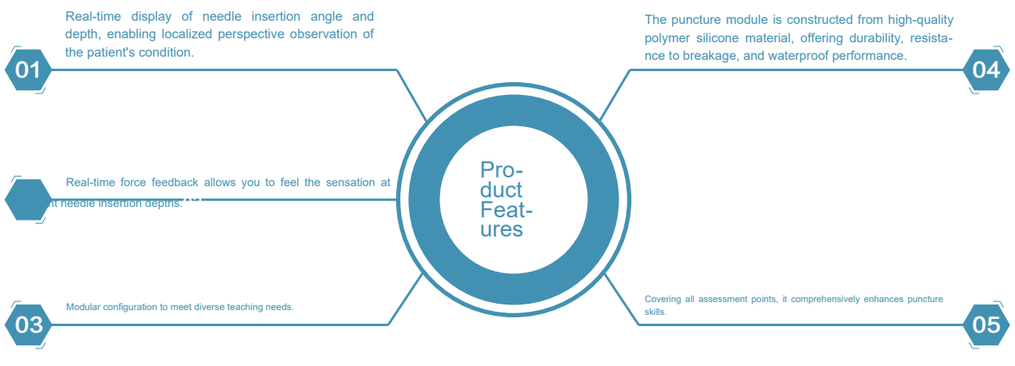
abdominocentesis

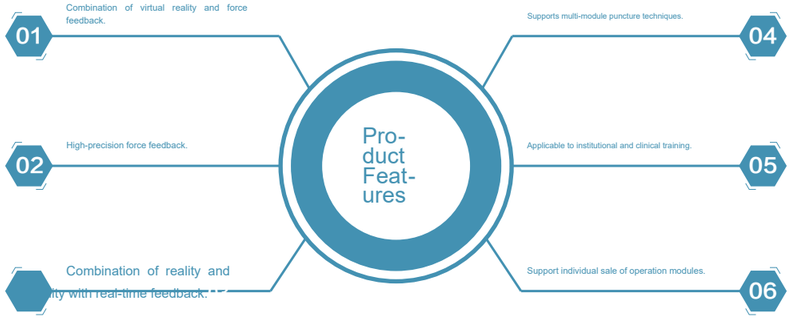


bone marrow aspiration



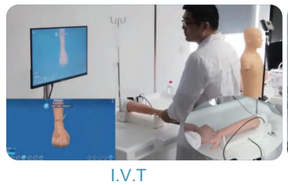
thoracentesis





Product Introduction and Display

The Nursing Comprehensive Puncture Teaching and Training System integrates virtual reality and force feedback technology, serving as an innovative teaching tool that supports various puncture skill training modalities, including venous indwelling needle insertion, arterial blood sampling, and intramuscular injection. Utilizing high-precision force feedback puncture needles and realistic silicone models, the system provides authentic tactile and visual feedback throughout the puncture procedure—from disinfection to tube sealing—with intelligent guidance and real-time feedback at each step. Equipped with fluoroscopic mode for visual observation of vascular structures, the system combines voice prompts with AI-assisted assessment to facilitate rapid skill acquisition by learners. It is suitable for medical school instruction and preclinical training, offering a safe and efficient practice environment.



I.V.T



intracutaneous injection



intramuscular injection



Arterial blood sampling



Multi-role Collaboration

In-hospital Trauma Emergency Training System Combining Real and Simulation Training

Comprehensive Emergency Care

Virtual-Real Integration Training System (Multi-Scenario)



Product Introduction and Display

The Multi-Role Collaborative In-Hospital Trauma Emergency Training System (CAVE Immersive Version) integrates CAVE immersive technology with trauma simulation robots, supporting simultaneous operation by multiple users to simulate real-world trauma emergency scenarios. The system features multi-role collaboration, voice-based role command interaction, task prompts, and operational scoring functions. It allows flexible operation sequences with fault tolerance, comprehensively records operational procedures, and provides real-time feedback on outcomes. Additionally, the system incorporates an intelligent patient physiological simulation engine and a 3D medical imaging and interventional simulation system, supporting visual presentations and procedural guidance for eFAST, pelvic X-rays, and DSA-guided embolization simulations. Furthermore, the system includes scoring and playback modules that enable the establishment of skill evaluation criteria, documentation of operational steps and physiological parameter fluctuations, as well as process playback, individual assessment, and training profile generation. This system enhances the collaborative, decision-making, and operational capabilities of medical teams in complex trauma emergency scenarios.



Clear nasal and oral secretions



Examine the pupils



trachea cannula



Detailed Operation Instructions

Immersive simulation environment: Provides 360° visual immersion

The CAVE immersive environment simulates real emergency rescue scenarios.

Advanced case library support: The typical trauma case library can be used, supporting step-by-step and path branch training.

Interactive integration of reality and virtuality: By combining physical simulation robots with virtual simulation software, it achieves seamless operation and simulation.

Seamless integration

Intelligent physiological feedback system: AI-driven physiological simulation provides real-time feedback on vital sign changes, enhancing training realism.

04

Multi-role collaborative operations: Supports coordinated efforts among multiple roles such as trauma team leaders, physicians, and nurses, with clearly defined responsibilities to enhance team efficiency.

Team collaboration efficiency.

05

Product Features

01 An immersive CAVE system that recreates realistic scenes.

02 Comprehensive emergency simulation mannequin with realistic skin texture.

03 Real-time interactive operations with intelligent step-by-step guidance.

04 Diverse teaching case studies to meet various instructional needs.

05 Covering all assessment criteria, it comprehensively enhances rescue capabilities.

06 Supports multi-user collaboration.

Product Introduction and Display

The Integrated Emergency Response Training System combines human models with three-dimensional virtual simulation technology. By integrating virtual and real-world elements, it reconstructs comprehensive emergency scenarios—including drowning rescue, traffic accident response, emergency care in large shopping malls, fire response at subway stations, and earthquake rescue operations—from pre-hospital care to transport procedures, transfer to hospital emergency rooms, in-clinic emergency interventions, and ICU care. The system provides full-process simulation covering pre-hospital, transport, and in-hospital phases, supported by CAVE immersive virtual environments for interactive teaching and demonstration. It delivers extensive, high-resolution, and high-quality visualizations to deliver an immersive operational experience. Multiple scenario modules integrate critical clinical knowledge such as injury assessment, airway patency establishment, chest compressions, airway clearance, and artificial respiration. Students analyze and evaluate various scenarios and clinical progression, applying appropriate rescue techniques. This comprehensive emergency protocol serves as an ideal training and assessment tool for nursing students and clinical interns prior to clinical practice.



First aid for drowning



Fire Emergency Response



Emergency Care for Car Accidents



ICU give first aid treatment



cardio-pulmonary resuscitation

Virtual and Real Combined Training System (One-to-Six)

Comprehensive Delivery

Intelligent Maternity Robot



Product Introduction and Display

The Combined Virtual and Real CPR Training System (One-to-Six) is an efficient emergency training tool that integrates highly realistic CPR manikins with advanced monitoring software. The manikins are constructed from eco-friendly materials, feature distinct anatomical landmarks, and simulate vital signs such as carotid artery pulsations and pupillary responses, making them suitable for implementing the latest CPR standards of the American Heart Association. The monitoring software supports simultaneous connection of multiple manikins, enabling real-time monitoring and guidance of trainees 'procedures via wireless connectivity. The system provides detailed operational data analysis and various training modes, automatically evaluates performance outcomes, and generates assessment reports. The hybrid virtual-real functionality utilizes 3D simulation software to visualize operational data and simulated patient physiological responses, enhancing trainees' immersion and practical skills. With its portability and suitability for field training, the system serves as an ideal choice for CPR education.



Institutional Judgment

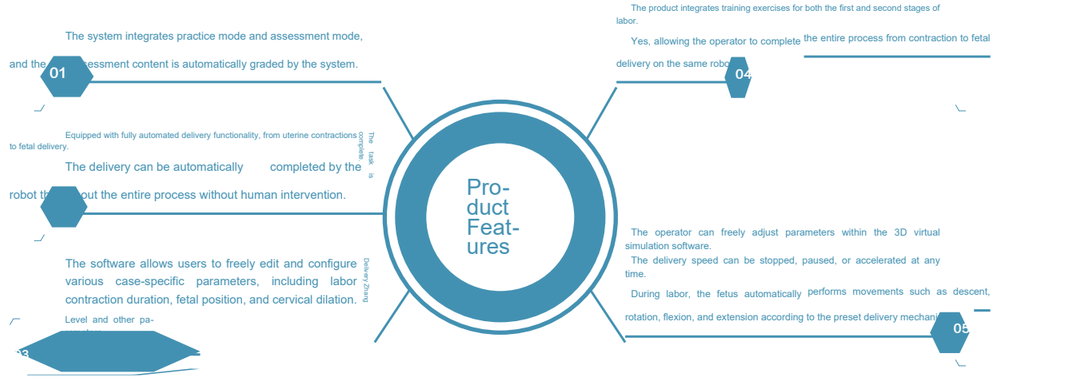
reaction of pupil to light

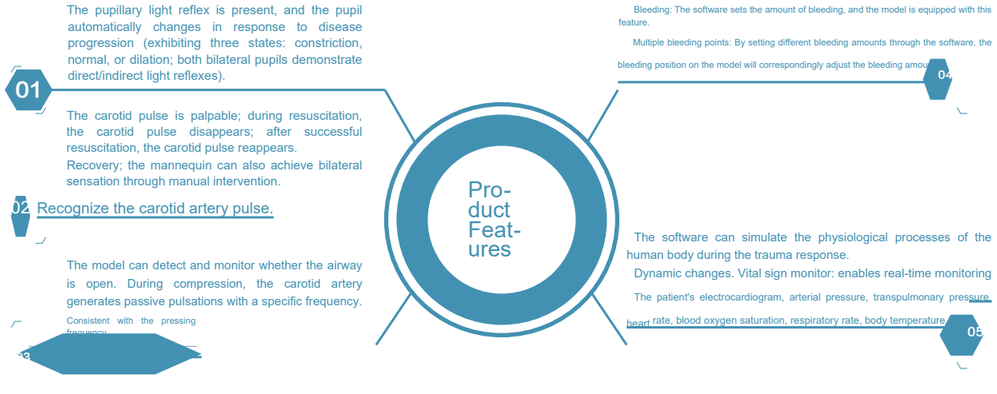


cardio-pulmonary resuscitation



electric defibrillation





Product Introduction and Display

The Comprehensive Delivery Intelligent Maternity Robot is an innovative teaching tool that integrates human simulation with virtual and real three-dimensional simulation software, designed to provide midwives and healthcare professionals with an immersive and realistic training experience. The system features a comprehensive suite of functional modules, including four-step palpation, fetal heart auscultation, vaginal examination, uterine massage, and second-stage labor simulation, covering critical skill training throughout the entire delivery process. The four-step palpation module utilizes a combination of virtual and real technologies along with AR (Augmented Reality) to deliver authentic tactile feedback and real-time responses. The vaginal examination module supports cervical dilation assessment, fetal position determination, and pelvic measurement, with parameters such as labor contraction duration and fetal position adjustable. The uterine massage module incorporates force feedback technology to help learners master proper techniques for managing postpartum hemorrhage. The second-stage labor simulation module dynamically replicates key delivery phases—including fetal head engagement, crown presentation, and supine extension—to provide a realistic delivery experience.



Dilation and Curettage Procedure



Cordotomy



Maternal-infant contact



Facilitate placental delivery



Postpartum Health Recovery Training System Combining Strengthening and Replenishing Effects

muscular tension

Real-Imaginary Combined Training System



Product Introduction and Display

The Postpartum Health and Rehabilitation Integrated Training System is an innovative teaching tool that combines a mannequin with a software system, designed to provide immersive and realistic learning experiences for postpartum rehabilitation training. Utilizing 3D virtual reality and force feedback technologies, the system vividly displays the dynamic movements of internal organs—something unachievable with traditional mannequins—in real-time through 3D visualization, offering learners a comprehensive perspective and in-depth learning experience. The system comprises four modules: Uterine Assessment, Uterine Involution, Breast Massage, and Moxibustion.



Uterine Assessment

moxa-moxibustion



Breast Assessment

involution of uterus

Pro-duct Feat-ures

01

The shape of the uterus will change, gradually becoming smaller and harder.

From a level umbilical fundus to no palpable mass above the pubic symphysis.

The operator can experience the hardness and softness of the uterus and perform effective massage training.

02

The system automatically determines whether the operator's breast massage sequence is correct and records the number of times.

03

Method: The system determines the operator's moxibustion height in real time.

And record the duration when the moxibustion height was excessively high or low.

04

Uterine massage: Classified into single-handed abdominal wall technique and bilateral abdominal wall technique.

In this mode, the simulated person automatically determines the position of the operator's hand.

Whether it is correct or not can only be determined by placing it within the correct range of positions to perform effective uterine massage.

05

Acupoint location: The operator performs acupoint location on the hardware simulated human.

During the operation, the system identifies the action and simulates the stimulation of acupoints on the human body.

Highlight: The software system highlights the corresponding acupoints and displays their names.

Motor conduction pathway: The pyramidal system (corticospinal tract) is involved.

The extrapyramidal system (red nucleus spinal tract, reticular spinal tract, vestibular spinal tract) and provides an analytical overview of its structure.

01

The resistance mode adjustment includes blade-type, lead-pipe-type, and gear-type

02

Resistance level adjustment includes the modified Ashworth Spasm Assessment Scale.

The manifestations of muscle tone at various levels.

Pro-duct Feat-ures

AI passive examination: Can be performed through voice interaction with an AI virtual patient

Explain the procedure and the examination content, obtain the patient's cooperation through voice communication, and perform passive motion examinations on the patient

04

The simulated modified Ashworth Spasm Assessment Scale evaluates muscle tone across six levels (Grade 0, 1, 1+,2, 3, and 4) with varying resistance. The software allows users to select and configure different muscle tone levels, automatically adjusting the simulated arm movements accordi

05

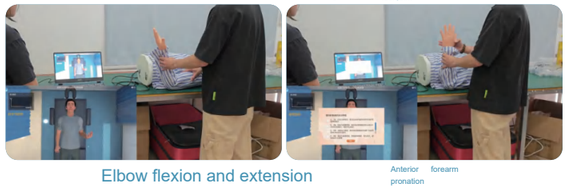
Product Introduction and Display

The system simulates various tactile sensations and patient physiological responses during clinical procedures, providing intelligent detection and feedback through virtual simulation and smart sensing technologies. Operators can perform interactive assessments on patients using simulated half-body manikins. The system fully employs 3D simulation technology to recreate clinical rehabilitation assessment scenarios, delivering fully immersive evaluation experiences for operators. As a hybrid virtual-real platform designed for rehabilitation medicine education and training, it enables customizable, perceptible, and assessable modified Ashworth spasticity grades (0/1/1+/2/3/4) along with scissor-like/lead-pipe-like/gear-like resistance levels. Additionally, it offers 3D teaching resources for central nervous system and motor conduction pathways, multimodal training modules, and AI-driven interactions, forming a closed-loop system encompassing "tactile simulation—data feedback—knowledge consolidation—assessment evaluation."



Anterior flexion of the shoulder joint

Abduction of the shoulder joint



Elbow flexion and extension

Anterior forearm pronation

01 Nasogastric Feeding Method Training System Combining Real and Virtual Elements

The combined deficiency-excess nasogastric feeding training system incorporates an artificial intelligence chip that can "sense" the actual depth and position of nasogastric tube insertion, with real-time feedback capabilities to simulate tracheal insertion, oral insertion, nausea reactions, intubation during coma, and normal intubation. The entire intubation process is synchronized in real-time with a 3D virtual simulation software, allowing visualization of the internal anatomical structures via fluoroscopic or sectional viewing functions.







02 Enema Method Training System Combining Real and Virtual Elements

The system employs actual medical devices for intubation procedures, providing real-time visualization of enema delivery speed and fluid infusion efficacy. An intelligent sensing chip automatically monitors intubation length and speed, while force feedback technology simulates the tactile sensation during operation. The system features automatic recognition and determination of the enema bag suspension height. During intubation and enema procedures, the intestinal position and insertion details are visualized via fluoroscopic imaging. This integrated virtual and physical enema training system delivers an authentic operational experience coupled with intelligent instructional training.









03 Sputum Aspiration Method: A Training System Combining Deficiency and Excess Principles

The Sputum Aspiration Method Combined Deficiency-Excess Training System is an intelligent teaching and training simulator that integrates virtual and real-world technologies. Utilizing virtual simulation and smart sensors, it provides intelligent monitoring and feedback, replicating various physiological responses of clinical patients and distinct tactile sensations during procedures. Guided by operational protocols, the system enables intelligent training of fundamental clinical sputum aspiration skills on the simulated mannequin.





04 Female Catheterization Training System Combining Deficiency and Excess Principles



The Female Catheterization Real-Imagination Combined Training System is equipped with an artificial intelligence chip capable of "perceiving" the actual depth and position of catheter insertion. Utilizing an intelligent teaching and training simulation system that integrates virtual and real-world environments, it guides students through practice following standardized operational procedures while providing prompts and corrections for erroneous maneuvers. The system meticulously records and analyzes students' operational behaviors, generating detailed analytical reports submitted to instructors.





06 Male Catheterization Training System Combining Deficiency and Excess Principles

The male catheterization training system combines both reinforcing and strengthening exercises, incorporating an artificial intelligence chip that can "perceive" the depth and position of the actual catheter insertion. It also simulates three stenotic and two curved anatomical structures. For catheter fixation, saline solution can be injected into the balloon using a syringe or the balloon can be directly inflated. The system determines whether the balloon has expanded sufficiently to secure the catheter. The entire catheterization procedure is synchronized in real-time with a 3D virtual simulation software, allowing visualization of the internal anatomical structures via fluoroscopic or sectional viewing functions.







07 Intravenous Infusion Teaching System Combining Deficiency and Excess Concepts

The Virtual-Real Integrated Teaching System for Intravenous Infusion is a training system that combines specialized force feedback needle insertion technology with a proportional model to highly replicate the tactile feedback of intravenous infusion procedures. This system enables selection of any venous puncture site and demonstrates the complete puncture process, while its integrated force feedback system accurately reproduces the operational tactile sensations. Additionally, it provides high-definition, realistic 3D visual displays that allow real-time visualization of various procedural perspectives, such as the sterilization process and needle insertion under fluoroscopy.









08 Gastric Washing Procedure: A Combined Training System for Deficiency and Excess Conditions

The Gastric Lavage Training System with Integrated Real and Virtual Technologies is an intelligent teaching and training simulator that combines virtual and real-world environments. Utilizing virtual simulation and smart sensor technologies, it enables intelligent detection and feedback, simulating diverse physiological responses in clinical patients and varying tactile sensations during procedural operations. Guided by standardized operational protocols, the system facilitates intelligent training of fundamental clinical skills for gastric lavage on the simulated mannequin.





09 Arterial Blood Sampling Training System Combining Deficiency and Excess Principles

Arterial blood sampling is performed using a dedicated force-feedback injection module for puncture operations. The operator can utilize the force-feedback device to disinfect the silicone arm directly, while the system accurately determines the disinfection location and trajectory. The system incorporates an intelligent sensing chip-equipped force-feedback puncture needle, which, through its sensing chip and data algorithms, automatically identifies the needle's insertion angle and depth, displaying real-time changes in needle angle and depth on the computer screen. If the angle is incorrect, an alarm is triggered, and a light on the needle illuminates.





09 Intravenous Indwelling Needle

A Teaching and Training System That Combines Both Theoretical Knowledge and Practical Application

The system enables the selection of two venous puncture sites; combined with a force feedback system, it accurately reproduces the tactile sensation during puncture procedures. Additionally, it can detect the needle insertion angle and whether the target blood vessel is identified, while allowing real-time visualization of the puncture site through the fluoroscopic window, displaying the anatomical structures of the blood vessel and surrounding muscles and adipose tissue. Direct disinfection can be performed on the silicone arm, with the disinfection marks displayed on the 3D virtual software model of the arm.







11 Insulin Injection Training System Combining Real and Virtual Elements

The peripheral device simulation employs a force feedback insulin pen and an intelligent simulation injection module to replicate the puncture, skin pinching, and injection steps, providing a realistic force feedback experience. The integrated virtual-real three-dimensional training software demonstrates the complete injection procedure—including site selection, skin pinching, needle insertion, and injection—with real-time monitoring of needle position, angle, and depth via intelligent guidance and a sectional view window. This system is designed to train medical students and nursing interns in performing insulin injection procedures in actual clinical settings, thereby enhancing operational skills and accuracy.









10 Comprehensive Intravenous Puncture Teaching System Combining Real and Virtual Elements

The integrated venipuncture teaching system combines virtual and real-world elements by integrating a mannequin with three-dimensional virtual simulation technology. Through the integration of virtual reality, augmented reality, and force feedback, it addresses the limitations of mannequins—such as the inability to visualize the puncture process from various perspectives—including interactive changes during the procedure—and overcomes the drawback of purely virtual simulation technologies, which fail to replicate the tactile feedback of actual clinical practice. This system enables seamless blended online-offline teaching and training.



▶ I.V.T

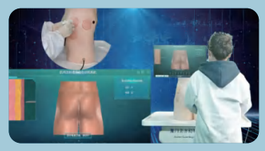


▸Pediatric scalp acupuncture

12 Intramuscular Injection Teaching System Combining Real and Virtual Elements



The peripheral device simulation module employs force feedback injection needles to replicate the complete injection process and regulate drip rates. The hybrid injection teaching system supports a comprehensive injection workflow and diverse vascular models, featuring positioning markers, simulated sterilization, and force feedback capabilities via intelligent sensing chips. The software system provides a virtual operating environment, mode selection, interactive virtual simulation, 3D visualization, and positioning techniques. Overall, this system integrates virtual reality and force feedback technologies to deliver an authentic injection operation experience and comprehensive teaching functionalities.





14 Comprehensive Emergency Medical Training System Combining Real and Virtual Elements

The Integrated Emergency Care Training System, which combines physical and virtual training elements, is a system that integrates simulated human models with three-dimensional virtual simulation technology. By leveraging both virtual and real-world environments, it reconstructs comprehensive emergency care scenarios and enables interactive operations for users. The system primarily consists of pre-hospital resuscitation modules designed for various case scenarios, such as sudden syncope, drowning, and traffic accidents. Each module integrates essential knowledge components, including injury assessment, trauma classification, establishment of intravenous access, chest compressions, airway clearance, artificial respiration, automated external defibrillator (AED) use, and electrical defibrillation.



►Emergency Care for Car Accidents



►First aid for drowning



15 Four-Step Palpation and Fetal Heart Sound Auscultation System Combining Real and Virtual Techniques

The four-step palpation and fetal heart auscultation system integrates traditional mannequin simulation with three-dimensional virtual simulation technology. The software allows for the selection of different fetal positions, with the fetus within the mannequin automatically aligning to the designated fetal orientation set by the software. All operations performed by students on the mannequin are recorded, and the virtual fetus and mannequin can be displayed through augmented reality technology.







14 Gynecological Examination Training System Combining Real and Virtual Elements



The Gynecological Examination Training System Combining Real and Virtual Simulation is an intelligent teaching tool that integrates virtual simulation with hands-on practice, supporting comprehensive training throughout the entire gynecological examination process. Equipped with high-precision sensors, the system provides real-time feedback on operational data and authentic force feedback, assisting learners in mastering correct examination techniques. It supports various gynecological examination procedures and synchronizes real-time visualization of anatomical changes through 3D virtual software, ensuring standardized operational protocols. Suitable for medical school instruction and pre-clinical skills training, the system offers a safe and efficient practice environment.





15 Vaginal Examination Training System Combining Real and Virtual Elements



The Vaginal Examination Real-Imagination Integration Training System is a training system that combines traditional mannequins with three-dimensional virtual simulation technology. Utilizing flexible robotics technology, it enables automatic cervical dilation (from 0 cm to 10 cm). The system simulates the process of cervical shortening from half its original length to complete disappearance, including changes in cervical softness/hardness and the effect of fetal membrane rupture. Six fetal positions can be configured to simulate fetal descent, flexion, and internal rotation. Trainees can determine fetal position by palpating the anterior-posterior and transverse sutures of the fetal head, thereby covering all practical training requirements for first-stage labor vaginal examinations.





17 Doppler Fetal Heart Rate Monitoring Combined Virtual and Real Training System

The Doppler Fetal Heart Monitoring Virtual-Real Integration Training System is an innovative teaching tool that combines modeling and virtual simulation technologies, specifically designed for prenatal diagnostic training. The system is equipped with three Doppler sensors (two fetal heart rate sensors and one uterine contraction pressure sensor), enabling real-time monitoring of fetal heart sounds and uterine contractions. The model features a maternal semi-trunk posture with open abdominal skin, allowing fetal positioning to be freely adjusted for comprehensive auscultation training across various fetal positions.







18 Delivery Mechanism Training System Combining Real and Virtual Elements

The Delivery Mechanism Integration Training System combines infant simulators with 3D virtual simulation technology. It consists of a software control module and a model component. During practical hardware operation, the model's displacement changes are displayed in real-time synchronization within the computer software, allowing real-time interaction with the virtual imagery. Users can manually adjust the model's position according to the software-defined fetal delivery posture and fetal position, with an immediate success confirmation upon reaching the correct position.









19 Obstetric Uterine Massage Force Feedback Training System

The obstetric uterine massage force feedback training system integrates a pregnant woman simulator with three-dimensional virtual simulation technology. It can simulate postpartum hemorrhage by demonstrating the correct uterine massage process, including the gradual reduction in uterine size and hardening of the uterus. Additionally, it enables simulation of uterine cavity packing using either a real uterine balloon or gauze strips, with intelligent assessment of whether the packing is correct and complete.







20 Traditional Chinese Medicine Moxibustion Training System Combining Deficiency and Excess Principles

The Traditional Chinese Medicine Moxibustion Deficiency-Excess Integration Training System is an educational tool that combines virtual simulation and intelligent sensing technology, specifically designed for moxibustion skills training. The system provides real-time feedback on the operator's moxibustion height and acupoint positioning through high-precision sensors, delivering an authentic moxibustion experience. It supports a 720° free-viewpoint perspective and case-based teaching, enabling learners to rapidly master moxibustion techniques. Suitable for medical students and clinical healthcare professionals, the system offers a safe and efficient practice environment.





21 Traditional Chinese Medicine Massage System Combining Deficiency and Excess Principles

The Traditional Chinese Medicine Massage Training System Combining Deficiency and Excess is an educational tool that integrates virtual simulation with hands-on practice, supporting massage operation training on adult arm models. The system provides real-time feedback on massage force and acupoint positioning through sensors, delivering an authentic massage experience. It features a 720° free-view perspective and intelligent voice recognition, enabling learners to rapidly master massage techniques. Suitable for medical school instruction and pre-clinical skills training, the system offers a safe and efficient practice environment.







22 Gua Sha Real-Imagination Combined Training System

The Gua Sha Virtual-Physical Integration Training System is an educational tool that combines virtual simulation with hands-on practice, supporting comprehensive training throughout the entire gua sha technique process. Equipped with high-precision sensors, the system provides real-time feedback on the operator's scraping force and angle, delivering an authentic gua sha experience. It supports multiple viewing angles and human body system displays, enabling learners to rapidly master gua sha techniques. Ideal for skill training of medical students and clinical healthcare professionals, the system offers a safe and efficient practice environment.







23 A Training System Combining Deficiency and Excess in the Sanlingzhen Acupuncture Therapy for the Kiyuan Acupoint in Mongolian Medicine

The system employs 3D printing technology to simulate the authentic structure of the human knee joint, enabling comprehensive training for acupuncture procedures at the knee-eyelid acupoint. Equipped with intelligent sensors and force feedback technology, it provides realistic tactile feedback during needle insertion, helping learners master proper acupuncture techniques. The system supports various acupuncture techniques and positioning options, integrating MR (Mixed Reality) technology to achieve millimeter-level precision positioning and deliver an immersive learning experience. It is ideal for medical school instruction and preclinical skills training, enhancing students' clinical operational proficiency.







24 A Training System Combining Deficiency and Excess in Mongolian Thermal Acupuncture Therapy for Hip Acupoints

The system employs 3D printing technology to simulate authentic human anatomy, enabling comprehensive training for hip joint acupuncture procedures. Equipped with intelligent sensors and force feedback technology, it delivers realistic acupuncture tactile feedback and operational guidance, helping learners master proper acupuncture techniques. Supporting various acupuncture techniques and positioning options, the system utilizes MR (Mixed Reality) technology to achieve millimeter-level precision positioning, delivering an immersive learning experience. Ideal for medical school instruction and preclinical skills training, it enhances students' clinical operational proficiency.







25 Ear Acupoint Seed Burial Training System Combining Real and Virtual Elements

The Ear Acupoint Seed Burial Training System is an educational tool that integrates virtual simulation and intelligent sensing technology, specifically designed for training in ear acupoint seed burial techniques. The system provides real-time feedback on the operator's pressure intensity and acupoint positioning through high-precision sensors, delivering an authentic seed burial experience. It supports a 720° free-view perspective and case-based teaching, enabling learners to rapidly master the techniques. Suitable for medical students and clinical healthcare professionals, the system offers a safe and efficient training environment.







27 Pediatric Scalp Pin Venous Puncture Combined Training System for Real and Virtual Practice

The Pediatric Scalp Pinhead Venipuncture Virtual-Real Integration Training System utilizes virtual reality and force feedback technology to simulate the actual venipuncture procedure environment and steps. The peripheral simulation enables realistic venipuncture operations and force feedback feedback, supporting arbitrary puncture site selection and drip rate adjustment. The virtual-real integration software supports the complete venipuncture workflow, providing precise force feedback and visualization of vascular anatomy. The software displays the needle position and angle in real time, along with tactile feedback and disinfection mark visualization. The operational steps include instrument preparation, vein selection, vascular elasticity assessment, puncture site selection, puncture site disinfection, and the venipuncture procedure itself.







26 Children's Drowning Prevention Training System Combining Theoretical and Practical Elements

The pediatric simulator enables the operator to assume the correct positioning, with real-time 3D simulation providing interactive visualization of the dynamic positioning process. The simulator allows direct insertion and removal of the laryngoscope, accompanied by real-time 3D simulation that demonstrates the precise positioning movements during these procedures. Additionally, it facilitates direct tracheal intubation operations, with real-time 3D simulation illustrating the exact intubation positioning. Real-time dynamic images of the laryngoscope's interior and clear visualization of the internal anatomical structures are available throughout the procedure.





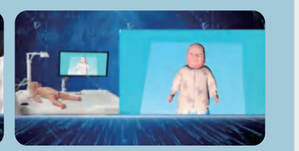


28 Infant and Toddler Audio-Visual Training System Combining Virtual and Real Elements

The infant audiovisual training system combines virtual and real elements to simulate authentic operational environments and procedures, serving as an effective tool for auditory and visual development in infants. For visual training, the software replicates infants' blurred visual perception through head perspective views, flashing of visual processing regions, and neural interaction animations. For auditory training, the system records sound duration and intelligently identifies the decibel levels and spatial positions of sand锤 sounds, employing similar visual and auditory simulation techniques to facilitate training progress.







29 Neonatal Gastrointestinal Decompression Training System Combining Real and Virtual Elements

The Neonatal Gastrointestinal Decompression Combined Real-and-Virtual Training System is an intelligent teaching and training simulator that integrates virtual and real-world technologies. Utilizing virtual simulation and smart sensors, it enables intelligent monitoring and feedback, simulating various physiological responses of clinical patients and distinct tactile sensations during procedural operations. Guided by operational protocols, the system facilitates intelligent training in fundamental clinical gastrointestinal decompression skills on the simulator, including standard-ized intubation procedures, oral cannulation, and tracheal insertion.

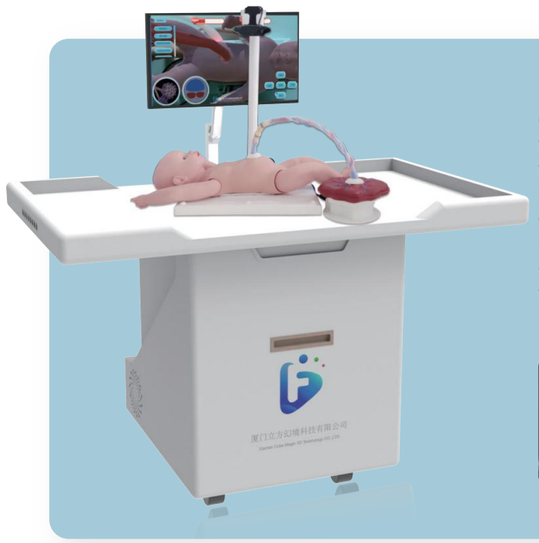






30 Newborn Umbilical Cord Management Hybrid System

The system supports free voice communication recognition for human-computer interaction, enabling coordinated operations during teaching and training. It provides automated voice prompts and operational guidance throughout the entire process. The neonatal umbilical cord simulation mannequin features an umbilical cord that pulsates autonomously, demonstrating the temporal changes in umbilical cord vascular coloration, blood flow velocity, and pulsation frequency post-delivery. These dynamic changes are synchronized with the virtual-real integration training software to accurately replicate the umbilical cord's physiological progression.







31 Emulsion Preparation: A Virtual-Real Integrated Operating System

The emulsion preparation system employs a hybrid virtual-real approach to simulate the entire emulsion preparation process. It intelligently detects manual operations and displays them in real-time through 3D software, enabling students to practice independently even without full mastery, thereby avoiding material waste caused by inexperienced direct operation. The system also identifies incorrect operations and provides immediate corrective feedback.







32 Combined Training System for Acute Respiratory Foreign Body Obstruction in Infants and Young Children



The entire inversion process identifies the fetal body posture angle to determine whether the infant's striking position after inversion is correct. The striking force and frequency can also be assessed in real time; excessive or insufficient force will be displayed in the 3D virtual simulation software. When performing chest compressions, the system evaluates whether the compression position is correct, with both compression force and frequency synchronized for display in the 3D simulation. Real-time changes in the infant's internal organs during compression can be visualized in 3D perspective. The system automatically analyzes the correctness of the operator's striking position, force, and frequency, and evaluates the effectiveness of the procedure.





33 Infant and Toddler Feeding Training System Combining Realistic and Imagined Elements

The Infant Feeding Virtual-Real Integration Training System employs a hybrid virtual-real approach to simulate the entire infant feeding process. Equipped with intelligent infant posture recognition, the system features parameters such as stability and posture consistency. Through 3D virtual interaction, users can observe the movement of milk in the infant's stomach under various postures, helping them understand whether milk reflux occurs. The system also teaches proper back-scratching techniques for infants; operators perform the exercise on a simulated human back, with the software synchronizing movements in real time and displaying relevant parameters.







34 Newborn Touch Therapy Nursing System Combining Real and Virtual Elements



The neonatal massage care system employs a combined virtual and physical approach, recording the operator's massage techniques on a simulated human body in real time and transmitting the data to the virtual simulation software. The system supports proper positioning and can track the location and direction of massage maneuvers in real time. An intelligent pressure sensor detects the massage force and displays it via a force bar. The system enables massage operations on the head, chest, abdomen, upper limbs, lower limbs, back, and buttocks, providing corresponding real-time visualization through the integrated virtual and physical interface.





35 The Elderly Heimlich Maneuver: a Combined Real and Virtual Operating System

The Elderly Heimlich Maneuver Combined Virtual-Real Operating System is a training system based on virtual reality technology. The system comprises a half-body simulation mannequin and a 3D training software that integrates virtual and real-world elements. Its technical features include real-time analysis of the operator's impact force and frequency to assess the effectiveness of the maneuver, while displaying operational data and physiological changes in elderly patients within the virtual environment. This system is designed for skills training and assessment of nursing students and hospital interns, covering the complete sequence of the elderly Heimlich maneuver.







36 Artificial Training System for Elderly Individuals Combining Real and Virtual Elements for Urination Practice



The Elderly Manual Defecation Integration Training System is an educational tool combining virtual simulation and physical operation, specifically designed for nursing staff and medical students. Utilizing high-precision silicone human models and 3D simulation software, the system provides a realistic defecation operation experience. It supports intelligent voice interaction and real-time data feedback, assisting learners in mastering correct operational procedures and techniques. Equipped with an automatic scoring function, the system ensures training effectiveness and is suitable for both academic instruction and pre-clinical skills training.





37 Elderly Pressure Ulcer Prevention Training System Combining Deficiency and Excess Principles

The Elderly Pressure Ulcer Prevention Integrated Training System is a software system based on virtual reality and 3D simulation technology. It creates a three-dimensional virtual space that presents the entire pressure ulcer prevention process through interactive 3D animation design. Users can freely switch between steps and observe dynamic changes in 360° during the simulation. The system is suitable for skills training and assessment in medical schools, nursing colleges, and hospitals. By combining virtual simulation with practical operations, it provides comprehensive pressure ulcer prevention training for the elderly.







38 Pharyngeal Swab Collection Training System Combining Practical and Theoretical Aspects

The Virtual-Real Integration Training System for Pharyngeal Swab Collection is a medical teaching tool that combines virtual reality with physical simulation, specifically designed for training pharyngeal swab collection skills. Utilizing high-precision human models and 3D simulation software, the system provides an authentic collection experience, supporting both oropharyngeal and nasopharyngeal collection methods. It offers real-time feedback on the operator's insertion length, collection position, and pressure to ensure standardized procedures. The system features perspective and sectional views for intuitive visualization of internal anatomical structures, complemented by voice guidance and intelligent error-correction functions to help learners rapidly master the essential techniques of pharyngeal swab collection.





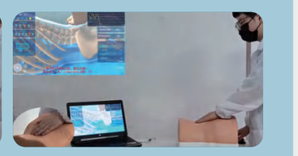


39 Joint Mobilization Therapy Training System Combining Real and Virtual Elements



The Joint Mobilization Training System integrates VR 3D virtual simulation technology with robotic simulation-based automatic perception technology, forming a comprehensive teaching platform. The system analyzes data and displays operational parameters and joint compression changes—including compression depth, frequency, mobilization level, repetitions, and force intensity indicated by color codes. Additional features include standardized manual technique demonstrations, free-mode operation, customizable mobilization level settings, pressure visualization, compression depth curve simulation, joint mobilization count statistics, and voice interaction capabilities. The system supports AI-powered voice interaction and audio feedback with tiered operational responses.



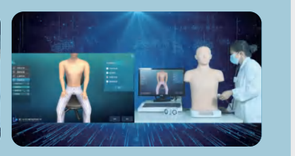


40 Cardiopulmonary Auscultation Training System Combining Deficiency and Excess Principles



The Cardiopulmonary Auscultation Real-World and Virtual Simulation Training System is a medical teaching tool that integrates virtual reality with physical simulation, specifically designed for the training of cardiopulmonary auscultation skills. Utilizing high-precision mannequins and 3D simulation software, the system provides an authentic cardiopulmonary auscultation experience, supporting various sound settings including normal and abnormal heart sounds as well as respiratory sounds. The system features fluoroscopic functionality, enabling real-time visualization of internal anatomical structures, and is paired with a dedicated stethoscope to ensure precise auscultation feedback for operators. It supports flexible perspective adjustments and multiple auscultation positioning options, meeting both teaching and assessment requirements.





41 Meridian Facial Acupoint Massage Training System Combining Deficiency and Excess Principles

The Meridian Facial Acupoint Massage Training System with Combined Real and Virtual Techniques can detect variations in pressure applied to acupoints. Excessive or insufficient pressure is immediately displayed in real-time via a 3D virtual facial acupoint software interface. Users may freely select acupoints and perform combined real-and-virtual massage techniques, with the system providing feedback based on pressure intensity. When pressure consistently deviates from standard values, the system issues corrective prompts.



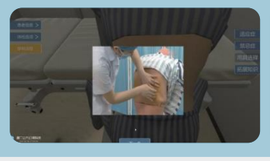


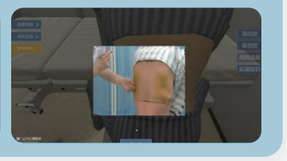


42 Closed Thoracic Drainage Teaching System Combining Theoretical and Practical Elements



The peripheral device simulation module enables operations through dedicated drainage bottles, offering features such as color and liquid volume variations, as well as selection of detachment locations, closely mirroring clinical practice. The system is divided into practice mode and assessment mode, supporting free viewpoint selection, local fluoroscopic display, and pipeline sealing functions. The system can determine whether the operator has correctly performed the procedure and provides corresponding feedback.





43 Elderly Aging Experience Virtual-Real Combined Training System

The system supports 3D six-degree-of-freedom functionality that enables free movement and 360° detail viewing, along with interactive control via virtual hands and gesture selection for scene objects. Users can perform repeated operations, walk, teleport, and adjust visual and auditory effects. The system includes VR headsets, soundproof ear muffs, weighted vests, forward-leaning straps, ankle and wrist weight bags, foldable canes, and knee/elbow restraint straps.









04

SOFTWARE PRODUCT PROFOLIO

VSPHUMANPHYSIOLOGICALPHARMACOLOGICALSIMULATOR 61
VIRTUALANDREALTEACHINGMANAGEMENTPLATFORM 63
AICLINCALTHINKINGTRAININGSYSTEM 65
INTERNALMEDICINE 67
SURGERY 69
OBSTETRICSANDGYNECOLOGY 71
PEDIATRICS 73
STOMATOLOGY 75
TRADITIONALCHINESE MEDICINE 79
FUNDAMENTALSOF NURSING SCIENCE 79
EMERGENCYNURSINGCARE 81
GERONTOLOGICALNURSING 83
REHABILITATIONTHERAPY 85

VSP Human Physiology and Pharmacology Simulator

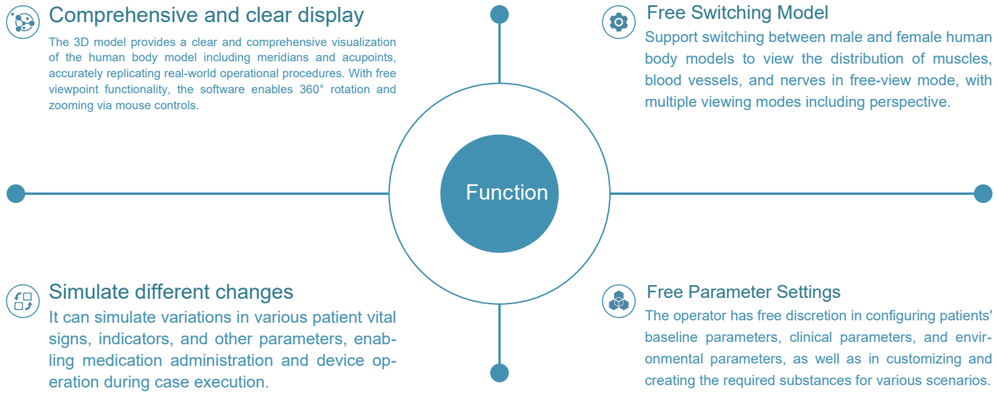


System Introduction

Patient-driven core physiological computing establishes a medical data platform that provides parameterized medical models (including SP patients, devices, instruments, pharmaceuticals, and environments) for core computational data simulations. Through physiologically driven computation of physiological parameter changes, SP patients automatically undergo both external and internal alterations. By analyzing these physiological parameter changes and the external/intrinsic transformations of SP patients, medical students can enhance their clinical reasoning capabilities and implement appropriate medical interventions.

Case Operation System

- Blood Chemical System
- energy system
- respiratory system
- Biomedical Sign Monitor
- Anesthesia machine.
- Cardiovascular system
- alimentary system
- tissue system
- Change in the patient's movement pattern
- Renal System
- Pharmaceutical System
- nervous system
- electrocardiogram
- Various physiological organ systems
- endocrine system



Comprehensive and clear display

The 3D model provides a clear and comprehensive visualization of the human body model including meridians and acupoints, accurately replicating real-world operational procedures. With free viewpoint functionality, the software enables 360° rotation and zooming via mouse controls.

Free Switching Model

Support switching between male and female human body models to view the distribution of muscles, blood vessels, and nerves in free-view mode, with multiple viewing modes including perspective.

Simulate different changes

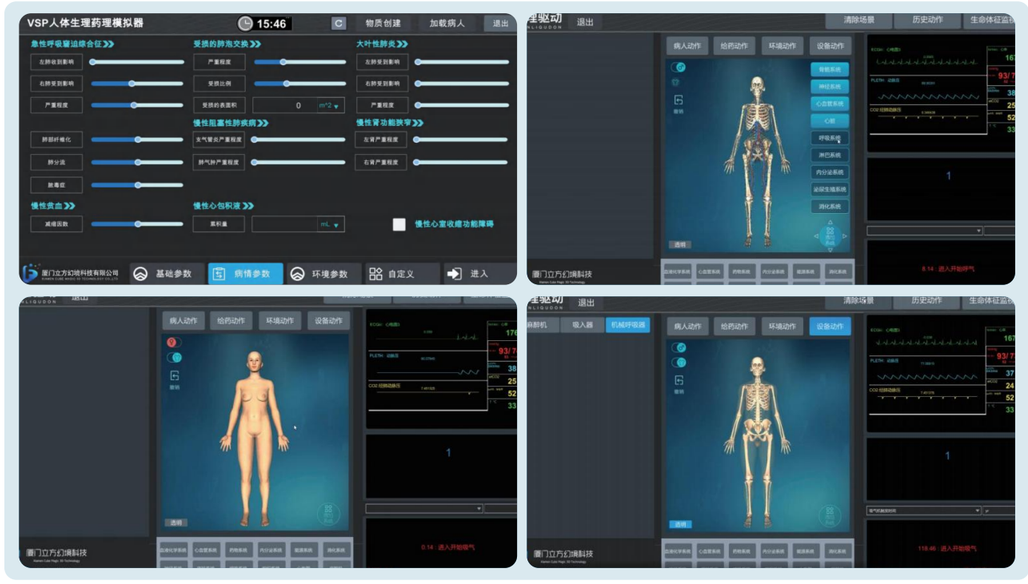
It can simulate variations in various patient vital signs, indicators, and other parameters, enabling medication administration and device operation during case execution.

Free Parameter Settings

The operator has free discretion in configuring patients' baseline parameters, clinical parameters, and environmental parameters, as well as in customizing and creating the required substances for various scenarios.

Software function

- Basic case parameters: Name, gender, age, height, weight, ideal body weight, baseline blood volume, basal metabolic rate, baseline heart rate, baseline systolic blood pressure, baseline diastolic arterial pressure, baseline respiratory rate, alveolar surface area, right lung ratio, skin surface area, maximum heart rate, minimum heart rate, functional residual capacity, total vital capacity, residual volume, body fat percentage, etc.
- Clinical parameters.
- enviromental parameter 。
- Material creation: basic parameters, atomization parameters, pharmacodynamic parameters, clearance parameters, and pharmacokinetic parameters.
- Custom: The operator can choose to create a new protocol or utilize an existing one. ① Patient movements, ② Environmental movements, ③ Device movements, ④ Administration movements.
- Load patient: The operator can load a pre-configured patient.



Management Platform For Theory Virtual Reality Teaching

System Introduction

The Cube Magic Virtual Simulation Teaching Management Platform aims to establish a novel teaching model that integrates resource co-construction, sharing, and teaching-research collaboration, combining theoretical and practical instruction. Both teachers and students can access educational resources and teaching applications within their authorized scope via PCs or mobile devices.

Features of the Management Platform for Theory

- Centralized management of various types of simulation-based training software, ensuring standardization, proceduralization, and normalization.
- Open and shared, unrestricted by time or space.
- Eliminate information silos and enable sharing of various types of data.
- Enhance the management of both physical and virtual practical training to diversify experimental teaching methods.
- Scalable, accessible, and integrated virtual simulation teaching software with network connectivity.
- Provide a standard interface for intelligent guidance and automatic grading of experimental results.
- Integrate and synchronize with school-related systems (such as the Unified Identity Authentication System and Academic Affairs System) to achieve data synchronization.
- Data mining and integration, along with big data statistics, analysis, and visualization.



Management Platform For Theory,Virtual Reality Teaching

Platform Features

- Teacher side: Teachers can conduct teaching activities through the platform, such as releasing courses, live-streaming lectures, assigning and collecting homework, organizing exams, publishing teaching resources, and managing personal resources. By leveraging the platform's big data, educators can monitor and guide students' learning progress.
- Student End: You can use the platform's learning features, including selecting live or recorded courses, receiving and viewing notifications, accessing teaching resources, completing assignments and exams, and engaging in instructional interactions.
- The platform provides comprehensive management support for medical education training, assessment, and skill development, offering all-around service support to facilitate efficient organization and operation, thereby achieving an optimal integration of teaching resources, instructional activities, and participating personnel.

Platform System Advantages

teach practise Practical Training



AI Clinical Thought Training System



System Introduction

The core functionalities of the system comprise two major components: AI consultation interaction and multi-dimensional intelligent assessment. The AI consultation interaction enables users to communicate with virtual patients through text input or prolonged audio recording, leveraging large language models for semantic intelligent recognition, parsing, and maintenance of multi-round dialogue history. It also simulates clinical procedures such as medical history collection, comprehensive visual examination, palpation, percussion, and auscultation. Users can customize auxiliary examination items and view corresponding reports; after consultation completion, medical records can be documented based on selected actions from the operational history. The multi-dimensional intelligent assessment evaluates five dimensions—consultation content, consultation procedures, consultation techniques, medical record documentation, and humanistic care—employing technologies like Natural Language Processing (NLP) and sentiment analysis to intelligently compare and score user performance across multiple metrics, including completeness, logical coherence, accuracy, keyword coverage, and communication methods, while generating personalized feedback.

Additionally, the system features a growth tracking function that analyzes user training data in real time, presenting the learning journey through charts and lists. It generates radar charts based on competency analysis to visually highlight users' strengths and weaknesses across various skill domains, while also producing AI-powered learning reports that integrate training history and performance scores.



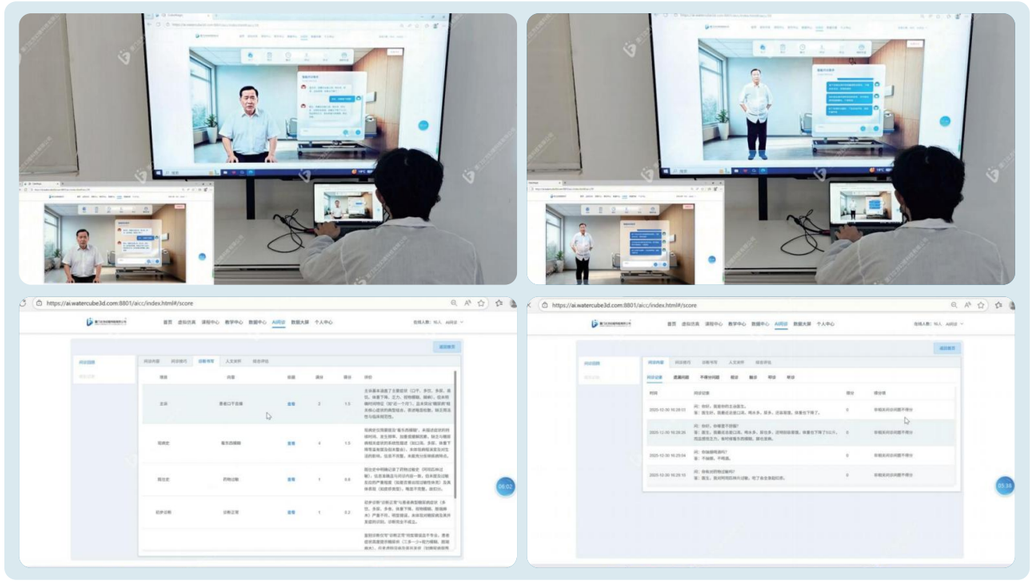
System Advantages

- The clinical interaction closely mirrors real-world scenarios and is highly practical: Supports dual-mode communication with text and voice, integrating semantic parsing capabilities of large language models with multi-round dialogue memory functions. This enables highly realistic simulation of actual physician-patient communication workflows, assisting learners in accumulating standardized clinical consultation experience.
- The evaluation system covers multiple dimensions comprehensively and is scientifically precise: Five major evaluation dimensions were established: consultation content, consultation procedures, consultation techniques, medical record documentation, and humanistic care, covering a comprehensive assessment ranging from professional competence to communication literacy; this framework enables precise identification of learners' competency gaps.
- Visualized learning and progress tracking for targeted improvement: Visualize the learning journey through charts and lists, clearly highlighting learners' strengths and weaknesses in each competency area. The evaluation report generated from historical training scores guides learners in targeted intensive training, enhancing learning efficiency.

01 High-fidelity clinical interaction

02 Multidimensional Intelligent Assessment

03 Flexible and customizable



Internal medicine

System Introduction

The Virtual Simulation System for Clinical Internal Medicine serves as a platform designed to support research and teaching activities for faculty and students in clinical medical institutions. This platform enables the visualization of visual blind spots that cannot be demonstrated by traditional manikins, allowing medical educators and students to intuitively observe and participate in all clinical internal medicine procedures. The real-time visualization closely aligns with clinical practice protocols, facilitating easier mastery of clinical techniques and skills by students, while enhancing faculty effectiveness in addressing instructional challenges and key concepts.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis / Three-Lumen Two-Cystic Catheter · Software Functions

- Presented in 3D image format
- Screen截图 with real-time marking of intubation position
- Intelligent voice interaction control, process navigation, etc.
- Free operation flexibility, allowing you to switch between operation steps freely
- Statistical software usage duration
- 720° free viewpoint rotation, zoom, and pan
- Quickly locate body parts of the patient, click on body parts to trigger events, and click on items to trigger actions
- Comprehensive and detailed analysis of the intubation and extubation relationship involving various functional modules
- View people and objects in the operation process freely, with flexible visibility control for optimal viewing from specific angles.
- The 720° view comprehensively displays the procedural movement sequence, perspective changes, perspective observation of the patient's internal condition, and the procedural position.

operating steps

- Verify medical orders(order sheet, treatment/examination orders) → Patient assessment(verify patient status, provide explanations, evaluate patient condition and environment) → Preoperative preparation(wash hands, wear mask, prepare supplies) → Procedure execution(verify patient status, adjust patient position, secure traction frame, re-verify patient status, lay out drapes, place tray, wear gloves, clean nasal cavity, measure intubation length, prepare intubation tube, perform intubation, inspect intubation tube, inject air, measure pressure, connect traction line) → Post-procedure management(note precautions, activate call button, tidy surroundings, re-verify patient status, wash hands and complete documentation, transport patient out of the ward) → Intubation removal(introduce tube removal procedure, transfer and verify orders, re-verify patient status, evaluate patient condition and environment, wash hands and wear mask, prepare supplies, re-verify patient status, apply paraffin oil lubrication, remove traction devices, wash hands and wear mask, lay out drapes, place tray, perform tube removal inspection, expel air, remove tube, re-verify patient status, activate call button, tidy and document procedures).



Internal medicine

System Features

- By supplementing existing teaching methods, it can reveal visual blind spots that traditional simulators cannot display.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the fun, interactivity, and vividness of teaching.
- Establish predefined clinical case scenarios to cultivate medical students' clinical practice, adaptability, critical thinking, communic-ation skills, and comprehensive evaluation abilities.
- Teachers can comprehensively evaluate students' operations through the system.
- Intelligent speech recognition interaction.

- The virtual platform integrates real-world models, delivering an immersive experience with authentic tactile feedback.
- It can avoid issues such as medical ethics and medical malpractice, and allows for repeated practice to enhance hands-on experience.
- Viewing perspectives, cross-sections, and more: 720° multi-angle views and 720° full-angle rotation for observing operational and motion changes.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.

Internal Medicine Software

- cholera
- Nursing Care for Snoring
- Aging-related pneumonia
- Nursing Care for Patients with Myocardial Infarction
- Comprehensive Nursing Care for Patients with Cardiogenic Shock
- dengue
- Cardiopulmonary auscultation
- Breast Cancer Care
- Nursing Care for Upper Gastrointestinal Bleeding
- Nursing Care for Patients with Dyspnea (Chronic Obstructive Pulmonary Disease)
- lymphadenoma
- radiotherapeutics
- Trilocular bicystic duct
- Nursing Care for Major Upper Gastrointestinal Bleeding
- Leukemia Nursing Philosophy-PICC Maintenance
- bone marrow aspiration
- Invasive Ventilation
- electrocardiographic examination
- Nursing Care for Cardiovascular and Cerebrovascular Diseases
- Disease Observation and Nursing Care for Patients with Cardiac Arrhythmia
- Lumbar puncture
- enteroscheocele
- acute respiratory failure
- Resuscitation and Nursing Care for Acute Heart Failure
- Care for patients with COPD accompanied by respiratory failure
- alimentary system
- gastroscopy
- closed drainage of thoracic cavity
- Nursing Care for Patients with Acute Myocardial Infarction
- OSCE Virtual Simulation Software for Coronary Heart Disease Nursing
- thoracentesis
- abdominocentesis
- Glucose meter self-test
- Diagnosis and Treatment of Acute Renal Failure
- Virtual Simulation Training and Teaching System for the Digestive System
- Standardized Patient Care for Dyspnea (COPD)
- Simulation Training for Clinical Nursing Thinking and Skills in Patients with Respiratory Failure



Some software demo-nstrations

Lumbar puncture

cholera

electrocardiographic examination

enteroscheocele

Surgery

System Introduction

The Clinical Medical Surgery Virtual Simulation System is a virtual simulation-based research and teaching platform specifically designed for surgical medical education. The system reconstructs various surgical cases, enabling medical students and faculty to visually examine case anatomical structures from multiple perspectives (e.g., sectional and fluoroscopic views), replicate clinical procedures, observe real-time operational processes, and evaluate procedural standards. This approach aligns medical instruction more closely with actual clinical protocols, facilitating students' mastery of clinical techniques and skills, while assisting instructors in addressing teaching challenges and key conceptual difficulties.

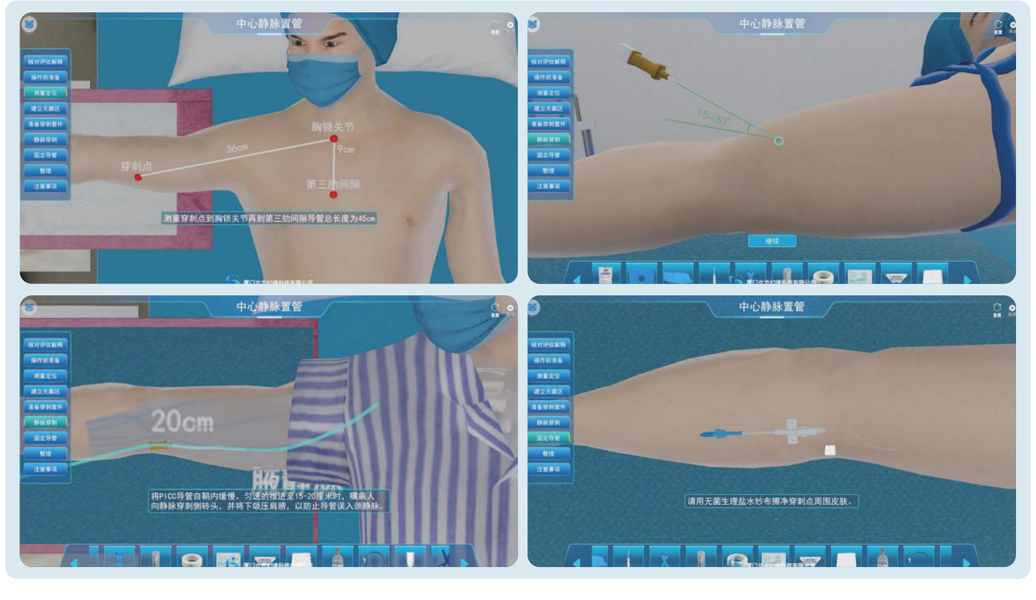
The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis/Central Venous Catheterization · Software Functions

- Highlighting the blind spots in perspectives that traditional teaching methods fail to reveal
- High operational flexibility and repeatability, allowing free switching and repeated execution of any steps
- The 720° view comprehensively demonstrates the surgical procedure, changes in viewing angles, and provides a perspective observation of the patient's internal condition.
- 720° free viewpoint rotation, zoom, and pan
- A comprehensive analysis of the interaction dynamics involved in each functional module
- View the operation process freely, with people and objects visible or hidden as needed for special viewing angles.

operating steps

- Verification, Evaluation, and Interpretation(verifying medical orders and patient status) → Assessment of the puncture site(applying a tourniquet, selecting an appropriate vein, determining the puncture site, releasing the tourniquet). The software utilizes local fluoroscopy to display venipuncture localization markers, allowing the operator to select the puncture site on the arm through interactive input → Procedure Flow(nurse preparation, material preparation, pre-procedural PICC catheter insertion, post-procedural care, and catheter placement precautions).



Surgery

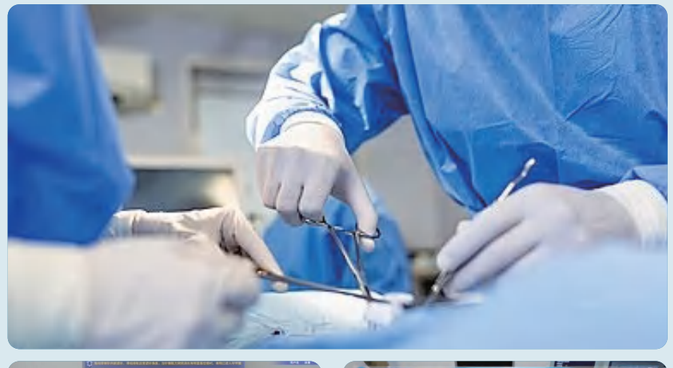
System Features

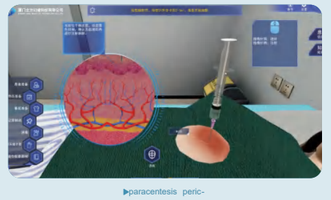
- By supplementing existing teaching methods, it can reveal visual blind spots that traditional simulators cannot display.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the fun, interactivity, and vividness of teaching.
- Establish predefined clinical case scenarios to cultivate medical students' clinical practice, adaptability, critical thinking, communication skills, and comprehensive evaluation abilities.
- Teachers can comprehensively evaluate students' operations through the system.
- Intelligent speech recognition interaction.
- The virtual platform integrates real-world models, delivering an immersive experience with authentic tactile feedback.
- It can avoid issues such as medical ethics and medical malpractice, and allows for repeated practice to enhance hands-on experience.
- Viewing perspectives, cross-sections, and more: 720° multi-angle views and 720° full-angle rotation for observing operational and motion changes.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.

Surgical Software

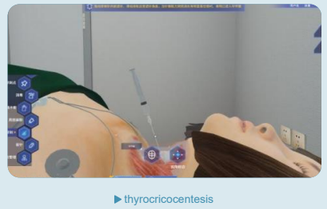
- Disinfectant draping. Cholecystectomy
- Central venous catheterization
- sigmoidectomy
- Tibial tuberosity osteotraction
- Pericardiocentesis. Appendectomy.
- T管引流 care
- Debridement for severe injury
- Operating Room Nursing Procedure Flowchart
- Anal stoma. Nuchal membrane puncture surgery
- Surgical Handwashing and Hand Rubbing
- Moderate injury during debridement
- Axillary approach for endoscopic thyroid
- Tracheal intubation. Breast assessment Surgery
- Nursing Care for Gastric Cancer Patients
- Debridement for minor injury
- Early Warning for Complications of Thyroid Cancer
- Brain Structure
- T管引流 care endoscopy
- Wound Dressing and Suture Removal
- Spinal Cord Diagnosis and Treatment System
- Intervertebral discectomy via transforaminal
- General Principles of Surgery: Virtual Simulation System (Debridement Technique)

Some software demonstrations

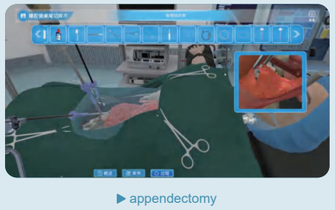




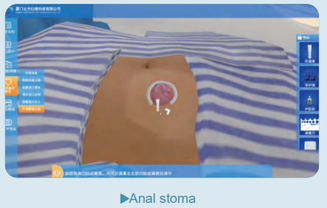
▶paracentesis pericardii



▶thyrocricocentesis



▶appendectomy



▶Anal stoma

Gynecotokology

System Introduction

The virtual simulation software for obstetrics and gynecology integrates medical simulation models to facilitate clinical simulation operations, providing an intuitive and clear visualization of the complete clinical procedures in obstetrics and gynecology. It allows users to view the procedural steps from multiple perspectives, including sectional and fluoroscopic views; transforms abstract medical knowledge into three-dimensional images, simulates the interactive relationships among various obstetric and gynecological factors, and supports human-computer interaction. Through repeated practice, the software enhances procedural memory and standardizes technical skills, thereby enabling proficient mastery of relevant clinical techniques.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

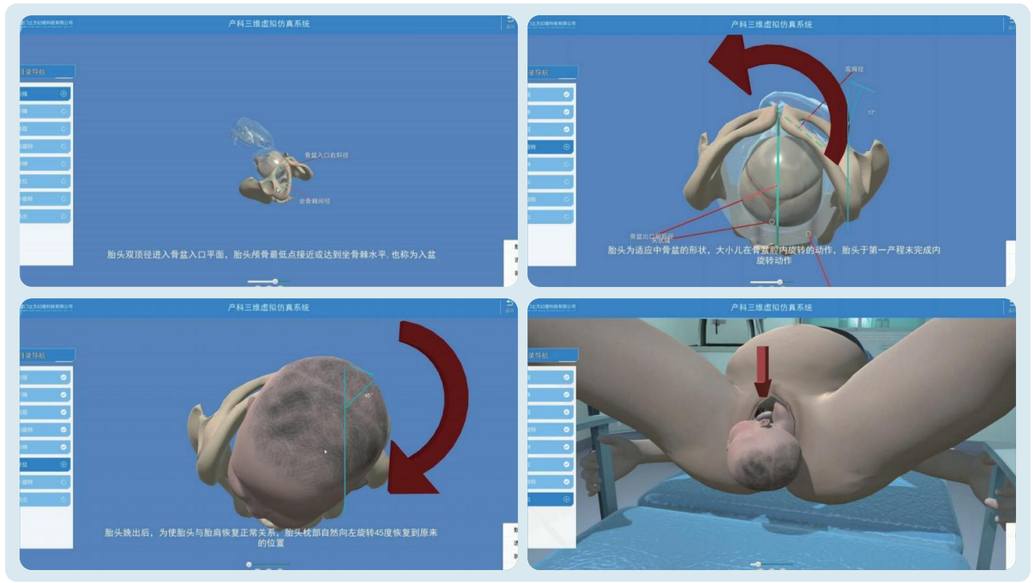
Case Analysis/Delivery Mechanism · Software Functions

- Highlighting the blind spots in perspectives that traditional teaching methods fail to reveal
- It offers operational flexibility and repeatability, allowing free switching and repeated execution of any steps.
- 360° free perspective rotation, zoom, and pan operational movement process, perspective changes, and provides a stereoscopic observation of the patient's internal condition.
- The 360° view comprehensively demonstrates the

- Comprehensive and detailed explanation of the functional relationships involving variations among auxiliary lines, fetus, pelvis, placenta, and umbilical cord modules
- Free visualization of auxiliary lines during the delivery process, including fetal pelvis, placenta, and umbilical cord, with adjustable visibility for convenient viewing from specific angles.
- Play the entire delivery process with a single click, and select from multiple viewing angles including the default view and principle view.

operating steps

- Comply with the standardized delivery mechanism and procedures, comprehensively demonstrating the eight procedural principles of labor: engagement → descent → flexion → internal rotation → extension → reduction → external rotation → delivery.



Gynecotokology

System Features

- By supplementing existing teaching methods, it can reveal visual blind spots that traditional simulators cannot display.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the fun, interactivity, and vividness of teaching.
- Establish predefined clinical case scenarios to cultivate medical students' clinical practice, adaptability, critical thinking, communication skills, and comprehensive evaluation abilities.
- Teachers can comprehensively evaluate students' operations through the system.
- Case setup.
- The progress bar controls playback steps and enables one-click playback.

- The virtual platform integrates real-world models, delivering both immersive experiences and authentic tactile feedback.
- It can avoid issues such as medical ethics and medical malpractice, and allows for repeated practice to enhance hands-on experience.
- Viewing perspectives, cross-sections, and more: 720° multi-angle views and 720° full-angle rotation for observing operational and motion changes.
- Intelligent speech recognition interaction.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.

Obstetrics and Gynecology Software

- HPV
- Cesarean section with forceps
- Dystocia of the shoulder
- Induced abortion
- Normal delivery
- Assisted breech delivery
- Mechanism of labor
- Postpartum hemorrhage
- Omphaloproptosis
- Four-step palpation
- Natural labor
- Tissue embryo
- Breast feeding
- Vaginal irrigation
- Preconception Consultation
- Prenatal Examination Record Establishment
- Examination per vagina
- Perineal cleansing
- Perverse labor
- Fetal Heart Monitoring
- Prenatal examination
- Fetal heart auscultation
- Placenta praevia
- Vacuum extraction of fetal head
- Placental Abruption Surgery
- Lateral decubitus delivery
- Laceration of the birth canal
- Cervical Cancer Screening
- External pelvimetry
- Internal pelvimetry
- Transverse occipital view
- Free-Position Delivery
- Pregnant cardiac arrest
- Use of Oxytocin
- Pregnant Woman Role Experience
- Postpartum Breast Care
- Vaginal and Cervical Medication
- Ectopic Pregnancy Care
- The Four Factors Influencing Delivery
- Episiotomy
- Vaginal secretion examination
- Traditional Chinese Medicine Pelvic Floor Muscle Rehabilitation
- Intrauterine Device Removal Procedure
- Intrauterine Device (IUD) insertion procedure
- Anatomy of the Female Reproductive Organs
- Postpartum hemorrhage-uterine cavity packing
- Comprehensive Simulation System for Ectopic Pregnancy Rupture and Intra-abdominal Hemorrhage
- Twin Pregnancy Clinical Thinking 3D Scenario Simulation Training System



Some software demonstrations



▶Normal delivery



▶Dystocia of the shoulder



▶Fetal heart auscultation



▶examination per vagina

Pediatrics

System Introduction

The pediatric virtual simulation software utilizes real pediatric cases as scripts to recreate pediatric nursing and emergency scenarios across multiple settings and perspectives, providing an intuitive and clear visualization of pediatric clinical processes. It creates a safe, controllable, and repeatable pediatric clinical environment for medical educators and students, transforming abstract pediatric clinical knowledge into three-dimensional virtual images for visual comprehension, thereby enhancing students' pediatric clinical skills.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis/Neonatal Emergency Care · Software Functions

• The software features: Skill Mode, Thinking Mode, and Assessment Mode.• Operation flexibility: You can switch between operation steps freely• Controlled playback: Drag the progress bar to adjust the playback content

• Free perspective: rotate, zoom, and pan freely 720°• Comprehensive Analysis of the Interrelationships Between Neonatal Service Processes and Resuscitation Techniques

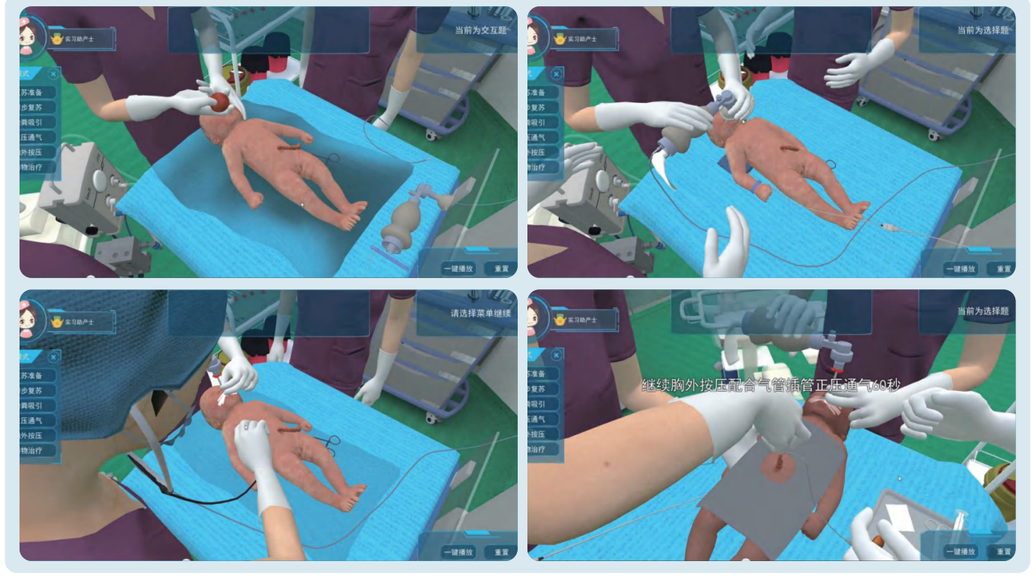
• Using neonatal emergency care as a case study, a 3D virtual scenario was constructed to demonstrate the teaching process of pediatric CPR skills.

• Multi-perspective viewing: Dual-window display, perspective view, and 3D sectional view enable 720° free observation of the infant's condition.

• Thinking patterns and assessment methods: Multiple clinical training scenarios are pre-designed to evaluate pediatric knowledge quizzes, emergency response, critical thinking, communication skills, and practical operations, enabling comprehensive assessment of student competencies and determination of final grades.

operating steps

• Newborn Emergency Care: Present the specific neonatal resuscitation procedures comprehensively, clearly, and accurately → Resuscitation Preparation (environmental preparation, personnel preparation, equipment preparation) → Rapid Assessment(term status, amniotic fluid level, respiration, muscle tone, presence of meconium in urine, etc.) → Initial Resuscitation(body temperature, positioning, airway management, respiration, etc.) → Positive Pressure Ventilation (oxygen saturation monitoring, ventilation mode selection, corrective ventilation, laryngeal mask airway, etc.) → Chest Compressions(tracheal intubation, chest compression techniques, etc.) → Pharmacological Treatment(umbilical vein catheterization, epinephrine administration, volume expanders, etc.) → Thinking Framework and Assessment Methods(knowledge quizzes, error identification prompts, comprehensive scoring systems).



Pediatrics

System Features

- Building upon existing teaching methodologies, this approach supplements the curriculum by utilizing authentic pediatric cases as prototypes to construct virtual pediatric clinical scenarios, thereby revealing details that traditional mannequins cannot replicate.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Teachers can provide a comprehensive score.
- Prespecified clinical case scenarios are designed to cultivate medical students' clinical practice skills, adaptability, critical thinking and communication abilities, as well as comprehensive evaluation capabilities.
- Enhance the fun, interactivity, and vividness of teaching.
- Intelligent speech recognition interaction.
- The virtual platform integrates real-world models, delivering both immersive experiences and authentic tactile feedback.
- It can avoid issues such as medical ethics and medical malpractice, and allows for repeated practice to enhance hands-on experience.
- Viewing perspectives, cross-sections, and more: 720° multi-angle views and 720° full-angle rotation for observing operational and motion changes.
- Multiple case scenarios are pre-set for training, Q&A sessions, and assessments.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.

Pediatric Software

• EENC • the newborn examination • Pediatric femoral artery puncture • Nursing Care for Children with Heart Failure • Children's Intelligent Diagnosis and Treatment Workstation

• Pediatric diarrhea • neonatal bath • Nursing Care for Neonatal Umbilical Abscess • Neonatal EEG Monitoring • Neonatal hypoxic-ischemic encephalopathy

• vaccinate • scleredema neonatorum • Neonatal Emergency Resuscitation • Artificial feeding of newborns • Screening for Pediatric Inherited Metabolic Diseases

• Use of the incubator • Use of the Blue Light Box • Newborn Umbilical Cord Management • Nursing Care for Children with Convulsions • Neonatal meconium aspiration syndrome

• Preterm Infant Care • Newborn diaper change • Pediatric femoral vein puncture • intracranial hemorrhage in newborn • Use and Maintenance of Neonatal Monitors

• Newborn Touch Therapy • neonatal septicemia • Neonatal pulmonary opacification • Neonatal Rh hemolytic disease • Neonatal hemolysis and neonatal jaundice

• Pediatric scalp acupuncture • First Aid for Pediatric Poisoning • Breastfeeding of newborns • Intracranial Pressure Monitoring in Neonates • Technique for External Cervical Vein Catheterization in Infants and Young Children

• Virtual Simulation System for the Neonatal Intensive Care Unit (NICU) • Advanced Life Support for Critically Ill Patients After Neonatal Surgical Procedures

• Principles of Fetal Circulatory System and Pathogenesis of Congenital Heart Disease



Some software demonstrations

▶Pediatric diarrhea

▶Pediatric scalp acupuncture

▶Newborn Touch Therapy

▶Pediatric femoral vein puncture

Stomatology

System Introduction

The dental medicine specialized software integrates virtual simulation technology with dental medicine education, enabling operators to visually observe the simulated oral environment. The software comprehensively, clearly, and accurately displays the entire process of dental treatment and care. It allows visualization of dental treatment principles and procedural steps from multiple perspectives, including sectional views and fluoroscopic views, providing medical educators and students with intuitive treatment scenarios.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis/Posterior Dental Defect Restoration Techniques · Software Functions

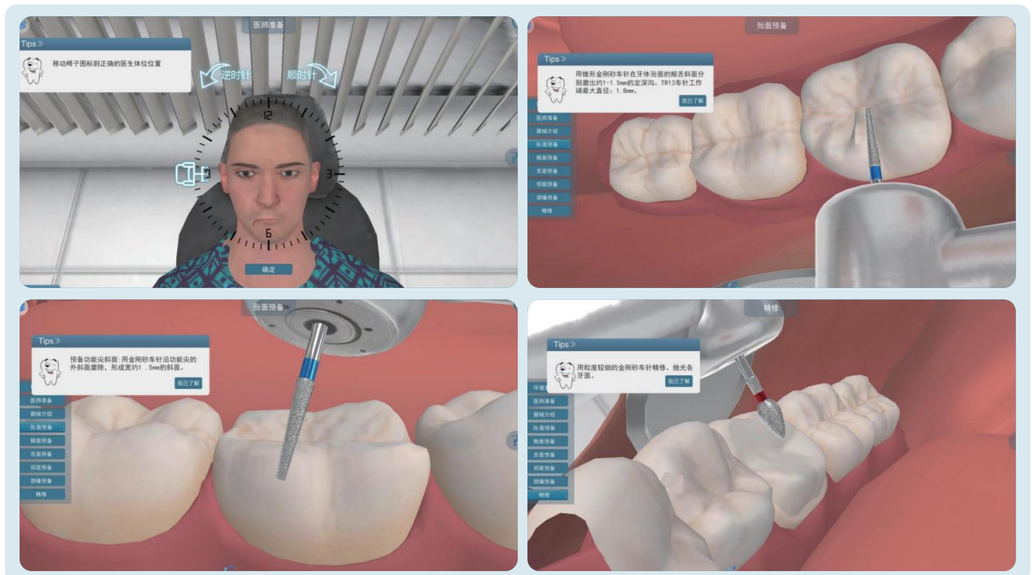
• Highlighting the blind spots that traditional teaching methods fail to reveal • Free operation flexibility, allowing free repetition and switching of operation steps • Video demonstrates the operation process and provides workflow prompts• The 720° view comprehensively demonstrates the surgical procedure, perspective changes, and provides a three-dimensional observation of the patient's internal condition.

• 720° free viewpoint rotation, zoom, and pan

• Comprehensive Overview of the Functional Module Changes Involved in Various Oral Surgical Procedures

Operating steps

• Environmental Preparation(Assessment of environmental cleanliness and safety) → Doctor-Patient Communication(3D animation, text, voice) → Instrument Display(Preparation of required instruments) → Occlusal Cavity Preparation(Virtual software preparation of the occlusal cavity) → Adjacent Cavity Preparation(Virtual software preparation of the adjacent cavity) → Finishing Stage(Virtual software selection of appropriate instruments for finishing) → Demonstration and Precautions(Zoom and rotation for tooth visualization, textual explanations of precautions).



Stomatology

System Features

- A 3D interactive virtual simulation teaching software that reveals perspective blind spots unattainable by traditional analog models.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the fun, interactivity, and vividness of teaching.
- Establish predefined clinical case scenarios to cultivate medical students' clinical practice, adaptability, critical thinking, communication skills, and comprehensive evaluation abilities.
- The virtual platform integrates real-world models, offering both immersive experiences and authentic tactile feedback.
- Teachers can provide a comprehensive score.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.
- It can avoid issues such as medical ethics and medical malpractice, and allows for repeated practice to enhance hands-on experience.
- View and observe operational and motion changes from multiple perspectives including perspective and sectional views, with 720° multi-angle and full-angle rotation capabilities.
- Multiple case scenarios are pre-set for training, Q&A sessions, and assessments.
- Video demonstration, process prompts, and step navigation.

Dental Medicine Software

- Tooth Extraction Surgery

* Adhesive bonding technique for straight wire arch fixed orthodontic appliances

* Oral Prevention-Related Techniques: Modified Bass Brushing Technique

- supragingival scaling

Posterior dental restoration technique for tooth structure defects-porcelain-fused-to-metal crowns

* Posterior dental structure defect restoration technique-Dental restoration

Posterior Alveolar Nerve Block Anesthesia

Oral Prevention-Related Technologies: Fissure Sealant Application

Some software demonstrations





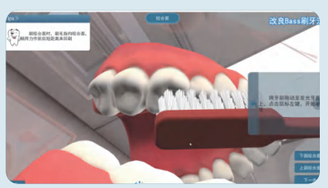
▶Tooth Extraction Surgery



▶supragingival scaling



▶Oral Prevention-Related Techniques-Fissure Sealant Application



▶Oral Prevention-Related Techniques: Modified Bass Brushing Technique

Traditional Chinese Medicine

System Introduction

The Virtual Simulation System of Traditional Chinese Medicine integrates virtual simulation technology with TCM principles, providing comprehensive, real-time, and precise three-dimensional visualization of TCM medical knowledge. It systematically illustrates the relationships between meridians, acupoints, and various human anatomical systems from the superficial to the internal levels. This system not only serves as a virtual platform for acupuncture education but also provides a basis for ensuring the safety and efficacy of acupuncture procedures. Additionally, the system incorporates predefined therapeutic protocols for various TCM interventions.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis/The Twelve Meridians and Acupuncture · Software Functions

- View the operation process in 360° view Document the operational procedures, generate a data model, and achieve precise teaching. You may freely choose any of the steps for observation, practice, or operation.
- Distinguished permissions for teachers and students, with separate management and practice/assessment modules tailored to different roles. Developed using the Unity engine to achieve interactive virtual simulation.
- A graphical operation menu that is simple and easy to use, with a built-in intelligent assistant and smart prompts for the workflow.
- The male and female human body models can be switched, allowing for multi-angle visualization of muscle, vascular, and neural distribution patterns through perspective and sectional views.
- It clearly and comprehensively demonstrates the interaction between meridians and instruments, accurately reproducing the operational process.

Operating steps

- Acupoint Localization Method(Surface Marking Technique, Bone Measurement Method, Finger Body Measurement, Simplified Acupoint Selection Method) → Acupoints(Human Model Demonstration, Labeling and Observation, Observation Perspectives and Notes) → Acupuncture Technique— Acupoint Localization Assessment — Free Practice of Acupoint Localization — Study/Assessment of Traditional Chinese Medicine Treatment Cases — Class Management — Assessment Management — Exam Analysis.



Traditional Chinese Medicine

System Features

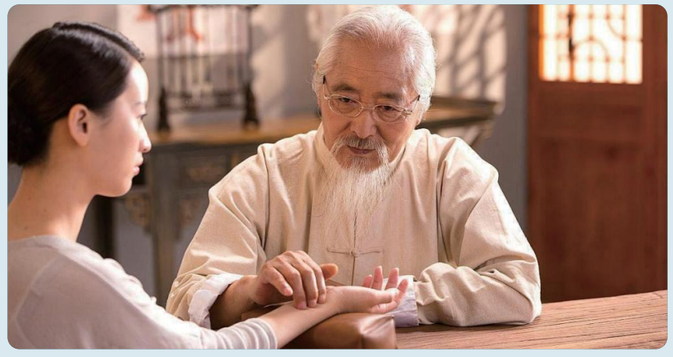
- A 3D interactive virtual simulation teaching software that reveals perspective blind spots unattainable by traditional analog models.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the fun, interactivity, and vividness of teaching.
- Establish predefined clinical case scenarios to cultivate medical students' clinical practice, adaptability, critical thinking, communication skills, and comprehensive evaluation abilities.
- The virtual platform integrates real-world models, offering both immersive experiences and authentic tactile feedback.
- Teachers can provide a comprehensive score.

- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.
- It can avoid issues such as medical ethics and medical malpractice, and allows for repeated practice to increase hands-on experience.
- Viewing perspectives, cross-sections, and more: 720° multi-angle views and 720° full-angle rotation for observing operational and motion changes.
- Multiple case scenarios are pre-set for training, Q&A sessions, and assessments.
- Video demonstration, process prompts, and step navigation.

Traditional Chinese Medicine Software

- Acupoint Testing System
- The Twelve Meridians and Acupuncture
- Acupuncture Rehabilitation Therapy Training System
- Clinical Thinking System for Seed Burial in Acupoints in Traditional Chinese Medicine
- Hematencephalon
- Diabetes mellitus
- Appendicitis
- Angina pectoris
- COPD
- virus hepatitis
- Moxibustion Virtual Simulation Teaching System
- Traditional Chinese Medicine Cupping Therapy
- Traditional Chinese Medicine Diagnosis and Treatment
- Ear point seed embedding
- Traditional Chinese Medicine Therapy
- Acupoint Injection
- Traditional Chinese Medicine Massage
- Traditional Chinese Medicine Enema

Some software demonstrations





▶ Traditional Chinese Medicine Massage Therapy



▶ Traditional Chinese Medicine Enema



▶ Ear point seed embedding



▶ Traditional Chinese Medicine Cupping Therapy

Basic Nursing Science

System Introduction

The Basic Nursing Virtual Simulation System integrates virtual simulation technology with fundamental nursing science, simulating dozens of authentic basic nursing cases. It provides real-time three-dimensional virtual representations of professional operational standards, procedural movements, instrument positioning, and other interactive relationships in basic nursing practice. Medical educators and students can visually observe each case scenario, acquire nursing knowledge and conduct practical training in accordance with standardized protocols, while the system simultaneously displays operational processes in real-time, correct errors, and facilitate assessments. This system effectively assists instructors in teaching and evaluation tasks, enabling medical students to more rapidly master fundamental nursing knowledge and skills.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

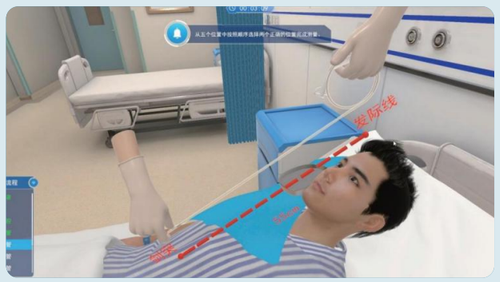
Case Analysis / Nasogastric Feeding Method · Software Functions

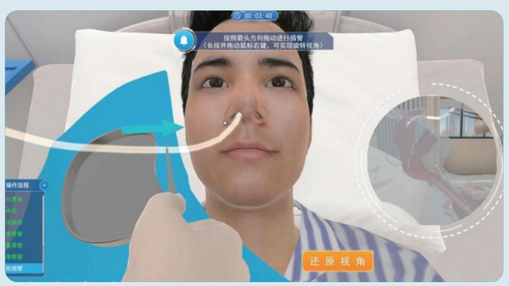
- Highlight the blind spots of traditional models
- Operation process flow and error prompts
- 720° free viewpoint rotation, zoom, and pan
- Free operation and repeatability, allowing free switching between any steps of repeated operations
- Comprehensive and detailed analysis of the relationship between changes across different functional modules during the nursing process
- The 720° view comprehensively demonstrates the surgical procedure, perspective changes, and the patient's condition observed through perspective imaging.
- The length and position of the gastric tube can be visually inspected, with auxiliary lines displayed during measurement.

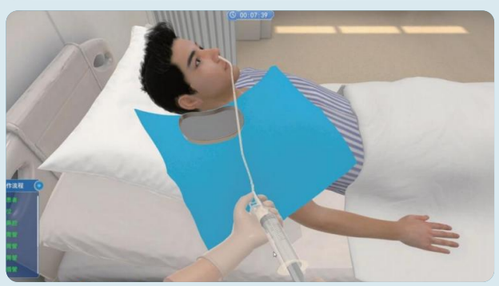
Operating steps

Simulated verification of medical orders → Simulation of transfer to the ward(verify patient status) → Nurse explains the situation to the patient → Patient assessment → Equipment preparation(washing hands, wearing mask, preparing supplies) → Return to the ward(verify patient status) → Pre-intubation preparation(adjusting position, laying treatment drapes, cleaning nasal cavity, preparing and examining gastric tube, lubricating gastric tube, placing curved tray) → Insertion of gastric tube(confirm xiphoid position, measure length, insert tube) → Real-time feedback of patient response → Inspection of gastric tube(aspirate gastric fluid, check for bubbles, auscultate stomach, secure tube) → Administration of nasogastric feeding → Post-feeding management → Clean-up(organize bed linens, wash hands, document records, provide postoperative instructions) → Tube removal → Final cleanup.









Basic Nursing Science

Software Features

- 3D interactive virtual simulation teaching software that demonstrates real-life emergency scenarios.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the authenticity, interactivity, and vividness of teaching.
- Prespecified scenarios are designed to cultivate medical students' practical skills, adaptability, critical thinking, communication abilities, comprehensive judgment, and emergency response capabilities.
- Teachers can provide a comprehensive score.
- The virtual platform integrates real-world models, immersive experiences, and authentic tactile feedback.
- View the operation and motion changes with 720° full-angle rotation.

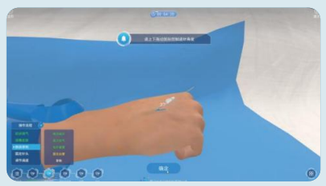
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.
- Avoid issues such as medical ethics and medical malpractice, and increase practical opportunities through repeated practice.
- 720° multi-view perspectives including top view and section view.
- Pre-set multiple emergency scenarios for training, Q&A sessions, and assessments.
- The intelligent voice guidance process displays key and challenging knowledge points in the system.
- Step-by-step operation records, data model generation, and support for precise teaching.

Basic Nursing Software

- asepsis
- clyster
- gastrolavage
- Suction Therapy
- nasal feeding
- arterial injection
- Ethanol sponge bath
- Tear duct irrigation
- Oral administration
- Axis Flip
- electrocardiograph monitoring
- ultrasonic nebulization
- Respiratory balloon
- dysphagia
- Intravenous blood sampling
- intramuscular injection
- hypodermic injection
- intracutaneous injection
- Oral Care
- I.V.T
- Arterial blood sampling
- Mask Oxygen Therapy
- gastrointestinal decompression
- Test solution preparation
- Bladder Irrigation Procedure
- Location of the gluteus maximus muscle
- Physical cooling method
- Put on and take off the isolation gown.
- PICC look after
- Intravenous indwelling needle
- Yungal拭e collection
- Sputum specimen collection
- Intravenous injection technique
- Wear sterile gloves
- Use of infusion pump
- Hospital Admission Assessment Process
- Catheterization performed on male patients
- Catheterization performed on the female patient
- Tracheotomy and sputum aspiration
- Measurement of Vital Signs
- Institutional dysphagia
- Stroke Care in Hospitals
- Fully automated gastric lavage machine
- Use of Ventilators
- Closed venous blood transfusion
- Penicillin anaphylactic shock
- Bilateral nasal cannula oxygen therapy
- Nursing Care for Patients with Ophthalmic Diseases
- Home-based Care for Type 2 Diabetes Mellitus
- Knowledge Map of Intravenous Infusion Nursing
- Real-time Feedback System for Upper Limb Function Training
- Basic surgical skills: incision, suturing, and knotting
- Virtual Simulation Experimental Teaching System for Centralized Preparation of Intravenous Medications



Some software demonstrations



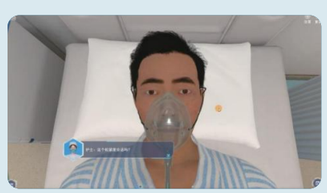
▶Intravenous indwelling needle



▶ asepsis



▶hypodermic injection



▶electrocardiograph monitoring

Emergency Nursing

System Introduction

The virtual simulation system for emergency care enables the simulation, recreation, and interaction of real-life emergency scenarios, replicating critical emergency details and procedural workflows. It immerses operators in complex simulated emergency environments, allowing them to fully experience the urgency of the situation. Within this virtual environment, operators can conduct various emergency response drills, enabling them to personally experience both sensory and psychological impacts. They can make informed judgments and perform emergency interventions based on the actual scene conditions, thereby cultivating essential competencies such as adaptability, critical thinking, communication skills, comprehensive assessment capabilities, and emergency management proficiency.

The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis/Car Accident CPR · Software Features

- The system integrates on-site accident rescue analysis and provides operational guidance for assessment and decision-making.
- Intuitively simulate scenarios such as traffic accident scenarios, CPR patient injuries, treatment methods, and emergency procedures through the integration of 3D animation and models.
- Display the patient's body, pulse, and chest movement during chest compressions from multiple angles, including perspective and sectional views.
- Auto-play: The 3D animation plays automatically or selectively based on the plot to enhance knowledge understanding and consolidation.
- Immersive learning: Medical models can be freely positioned on the patient's body surface; the operator's posture can be adjusted accordingly.
- The system records each operator's personal information, response performance, and experimental reports, generating review and summary materials as well as software operation records.

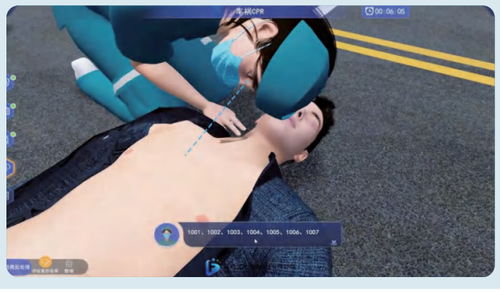
Operating steps

- ECG monitor operation: (Show blood pressure, heart rate, respiration, SPO2) → On-site rescue analysis, judgment and operation: Before resuscitation (Confirm environmental safety and assess injury condition) → Pre-resuscitation preparations(Assess consciousness status, remove defibrillator, check breathing and pulse, prepare for resuscitation) → Resuscitation process(Perform chest compressions, inspect oral cavity, clear airway, administer artificial ventilation, determine presence of ventricular fibrillation) → Post-resuscitation(Evaluate resuscitation efficacy, clean up).









Emergency Nursing

System Features

- 3D interactive virtual simulation teaching software that demonstrates real-life emergency scenarios.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the authenticity, interactivity, and vividness of teaching.
- Prespecified emergency scenarios are designed to cultivate medical students' capabilities in emergency practice, adaptive thinking, communication, comprehensive assessment, and emergency response.
- Teachers can provide a comprehensive score.
- The intelligent voice guidance process displays key and challenging knowledge points in the system.
- Step-by-step operation records, data model generation, and support for precise teaching.

- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.
- The virtual platform integrates real-world models, immersive experiences, and authentic tactile feedback.
- Avoid issues such as medical ethics and medical malpractice, and increase practical opportunities through repeated practice.
- Perspective, sectional view, and other 720° multi-view angles.
- View the operation and motion changes with 720° full-angle rotation.
- Pre-set multiple emergency scenarios for training, Q&A sessions, and assessments.

Emergency Nursing Software

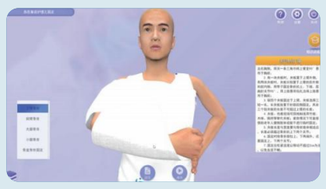
- Fixation Procedure
- drowning CPR
- Hemostatic bandaging and fixation
- Fire safety in elderly care facilities
- Comprehensive Management of Traumatic Brain Injury
- dressing
- traffic accident CPR
- Fracture Immobilization Procedure
- The patient suffered a sudden myocardial infarction and received CPR.
- Injury Classification at the Disaster Scene
- Transportation Technique
- Rescue operations following a mine disaster
- traffic accident CPR
- Deep vein puncture and catheter placement
- Common Nursing Adverse Event Management
- Defibrillation
- Rescue operations during floods
- Cardiopulmonary Resuscitation (In-hospital)
- Oropharyngeal airway placement procedure
- Resuscitation and Nursing Care for Acute Heart Failure
- Heimlich maneuver
- Fire Rescue
- Cardiopulmonary Resuscitation (Out-of-Hospital)
- Disaster: Debris Flow
- Special Environmental Rescue Course Resource Package
- Bandaging procedure
- Traumatic Hemostasis Technique
- Rescue operations during an earthquake disaster
- Defect Inspection and Classification Course Resource Package
- Stroke Emergency Care (Virtual Simulation of the Nervous System)
- Hemostatic procedure
- tracheotomy
- Disaster: Fire
- First Aid for Organophosphorus Pesticide Poisoning
- Virtual Simulation System for Tracheostomy Care
- Virtual Simulation System for Tracheal Intubation and Associated Nursing Care
- Identification and Emergency Management of Intravenous Infusion Air Embolism



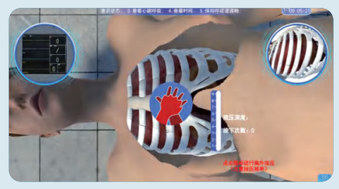
Some software demonstrations



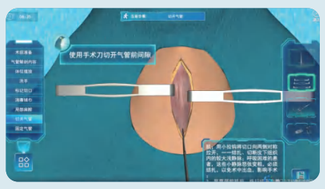
▶Transportation Technique



▶ Fixation Procedure



▶ drowning CPR



▶ tracheotomy

Geriatric nursing

System Introduction

The virtual simulation system for geriatric care is primarily designed for teaching and training in areas such as daily living assistance for the elderly, improvement of living environments, and disease rehabilitation. Developed based on virtual simulation technology, it enables the creation of virtual scenarios tailored to the actual care needs of seniors, featuring high fidelity and interactive functionality. This system assists educators and students in geriatric care disciplines in conducting teaching, demonstration training, simulation exercises, and academic assessments, thereby enhancing students' clinical skills.

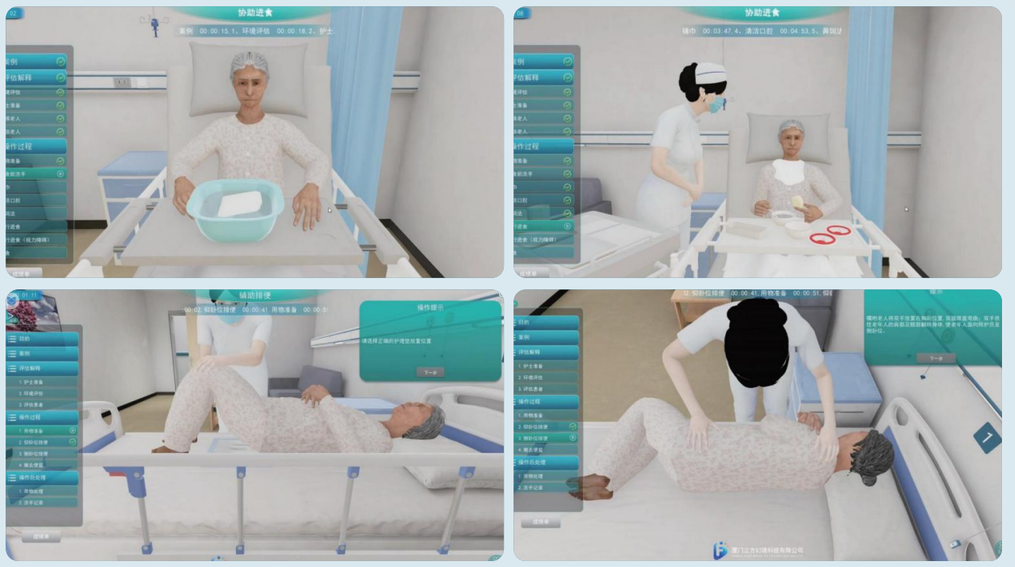
The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis / Elderly Life Care · Software Functions

- 3D interactive virtual simulation can reveal perspective blind spots that traditional models cannot display. comprehensively present the nursing movement process in a step-by-step and multi-perspective manner.
- Utilize 3D technology to
- You can select any area of the image to edit brushes, arrows, text, and more.

Operating steps

- Daily Care: Environment(regular lifestyle, cheerful mood, clean ward) → Diet(regular eating habits, moderate intake, healthy diet, balanced variety) → Rest(sufficient sleep, appropriate physical activity, avoidance of fatigue) → Medical Nursing: Clinical Monitoring (Monitoring vital signs, consciousness status, and changes in urine output) → Symptomatic Care(Providing tailored care for patients receiving prostate-related treatments) → Medication Management(Ensuring medication adherence, monitoring therapeutic efficacy and adverse effects) → Maintaining Unobstructed Urination (Assessing voiding patterns, frequency, and characteristics, with corresponding interventions) → Complication Prevention and Care(Preventing potential complications associated with benign prostatic hyperplasia and providing specialized nursing interventions).



Geriatric nursing

System Features

- A 3D interactive virtual simulation teaching software that demonstrates real-life elderly care scenarios.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Enhance the authenticity, interactivity, and vividness of elderly care education.
- Predefined nursing scenarios are designed to enhance medical students' understanding of knowledge and practical operational skills, allowing instructors to conduct comprehensive evaluations of students based on system-generated data.
- The virtual platform integrates real-world models, delivers immersive experiences, and provides authentic tactile feedback.
- Avoid issues such as medical ethics and medical malpractice, and increase practical opportunities through repeated practice.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.
- Viewing perspectives, cross-sections, and more: 720° multi-angle views and 720° full-angle rotation for observing operations and motion changes.
- Pre-set multiple emergency scenarios for training, Q&A sessions, and assessments.
- The intelligent voice guidance operates by displaying key and challenging knowledge points within the system.
- Step-by-step operation records, data model generation, and support for precise teaching.

Geriatric Nursing Software

Oral medication. Nebulized inhalation. Capacity assessment. Bedside mobility. Elderly assessment. Virtual elderly wellness center. Design of safe home environments for the elderly.

Sarcopenia senile dementia Nail Cleaning Take a warm bath Post-burn management Initial hemostatic procedure for trauma Prevention and Emergency Management of Food Retention in the Elderly

Nursing home Body料理 Promote expectoration Medication Assistance Topical eye medication Initial fixation after fracture Admission Process and Services for Nursing Homes

Toilet care. Hand and foot care. Geriatric mobility assistance. Oral hygiene. Nursing care for dysphagia. Initial management of crush injuries. Rehabilitation nursing for elderly patients with stroke.

Excretion care. Artificial defecation. Oral oxygen administration. Hair cleansing. Bedding tidying and replacement. Nursing care for elderly patients with fractures. Acute-phase nursing care for elderly patients with stroke.

Palliative care. Pressure ulcer prevention. Position change. Oxygen therapy procedure. Nursing care for patients with constipation. Nursing care for elderly patients with dementia. Nursing care for elderly patients with chronic obstructive pulmonary disease (COPD).

Assistive device transfer. Cardiac arrest. Alzheimer's disease. Oral suctioning. Training for ambulators. Nursing care for elderly patients with coronary heart disease. End-of-life nursing care for elderly patients with malignant tumors.

Assistance with defecation. Cleaning and disinfection. Wearing and removing clothing. Head and facial cleansing. Parkinson's disease care. Care for elderly patients with diabetes. Virtual simulation system for fire safety in nursing homes.

Elderly residential community. Specialized feeding. Bed mobility. Perineal hygiene. Mental health of the elderly. Nursing care for elderly patients with osteoporosis. Cognitive dysfunction in the elderly (virtual supermarket training).

Heimlich maneuver. Assisted feeding. Bathing and cleaning. Diaper change. Elderly mobility experience. Use of roll-type dental floss for elderly individuals. Post-radiotherapy and chemotherapy care for elderly patients with malignant tumors.

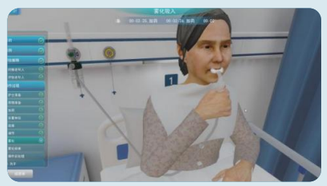
Assessment of Executive Function and Rehabilitation Nursing Care in Elderly Patients After Stroke A Virtual Simulation Training System for Psychological Intervention in Life Review for Elderly Individuals in Their Later Years



Some software demonstrations



▶ Nursing Care for Parkinson's Disease



▶ Inhalation nebulization



▶ Topical eye medication



▶ Initial fixation after fracture

Rehabilitation Therapy

System Introduction

The system employs virtual simulation technology to replicate real hospital wards and scenarios, providing operators with a fully immersive clinical experience. Operators can interact with various instruments identical to those used in clinical practice to perform rehabilitation training on patients. The software runs on computers, enabling immersive virtual interactions through finger operations and the use of VR headsets.

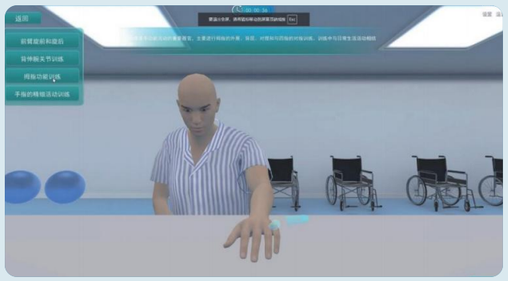
The system offers multiple software versions, including PC, VR, AR, MR, 3D interactive walls, CAVE immersive systems, and mobile versions, allowing customers to customize solutions according to their needs.

Case Analysis/Stroke (VR Version) · Software Features

- Simulate real hospital wards and scenarios using 3D technology to create an immersive clinical practice experience
- Virtual interactive operations can be performed using the simulated instruments loaded in the system through finger operations or devices such as VR headsets.
- 3D six-degree-of-freedom functionality: permite free movement and bending within virtual space, offering 360-degree panoramic views of details.

Operating steps

- Training of the upper limbs and hands: (Pretaration and supination of the forearm, wrist extension training, thumb function training, fine motor skills training for the fingers) → Walking training: Walking decomposition exercise training, scapular belt rotation training, pelvic rotation training, swing phase training of the affected leg, walking on parallel bars, indoor walking and outdoor activities, application of walking frames and wheelchairs → Stair climbing training: Go up and down stairs → Weight-loss walking training: The operator uses both hands to touch the suspension strap, while the patient undergoes weight-loss walking training.









Rehabilitation Therapy

System Features

- A 3D interactive virtual simulation teaching software that displays real-world scenarios.
- 3D virtual interactive teaching makes learning easier for students and teaching easier for instructors.
- Predefined nursing scenarios enhance medical students' understanding of knowledge and practical operational skills, allowing instructors to conduct comprehensive evaluations of students based on system data.
- Enhance the authenticity, interactivity, and vividness of rehabilitation medicine education.

- Avoid issues such as medical ethics and medical malpractice, and increase practical opportunities through repeated practice.
- It supports 720° multi-view perspectives, including perspective and section views, along with 720° full-angle rotation to view operational and motion processes.
- The system operates across multiple platforms—including PCs, mobile devices, and web interfaces—and integrates with hardware such as AR/VR/MR/CAVE systems and 3D interactive walls to deliver immersive virtual teaching experiences.

Rehabilitation Therapy Software

- cerebral apoplexy
- Rehabilitation of the pelvic floor muscles
- Walking Function Training
- Comprehensive Care for Stroke Patients
- Sports Anatomy
- .Bobath Technology
- Cervical Spondylosis Rehabilitation Therapy
- Creating a 3D interactive system at home
- Muscle Strength Assessment
- Joint Movement Technique
- Brunstrom Technology
- Assessment and Rehabilitation Intervention Management of Senile Sarcopenia
- Stretching Technique
- Stroke Rehabilitation Nursing
- Rehabilitation for Lumbar Disc Herniation
- Structural Analysis and Virtual Simulation System for Adolescent Scoliosis Correction
- Joint range of motion
- Cognitive Disorder Rehabilitation
- Rehabilitation Nursing for Hemiplegic Patients



Some software demo-nstrations



Pelvic Floor Muscle Rehabilitation



Walking Function Training



Creating a 3D interactive system at home



Assessment and Rehabilitation Intervention Management of Sarcopenia in the Elderly

05

CONSTRUCTION OF MEDICAL VIRTUAL SIMULATION TRAINING BASE

WEST CHINA HOSPITAL SI CHUAN UNIVERSITY 89

THE FIRST AFFILIATED HOSPITAL OF SOOCHOW UNIVERSITY 91

THE SECOND PEOPLE'S HOSPITAL OF AKSU PREFECTURE 93

NAN JING UNIVERSITY OF CHINESE MEDICINE 95

QUAN ZHOU MEDICAL COLLEGE 97

CHUXIONG MEDICAL COLLEGE 99

ZHENG ZHOU HEALTH VOCATIONAL COLLEGE 101

HUBEIPOLYTECHNICINSTITUTE 103

DALINURSINGVOCATIONALCOLLEGE 105

TIANJINMEDICALCOLLEGE 107

XINJIANGBAZHOUHEALTHSCHOOL 108

Construction of a Medical Virtual Simulation Training Base

The construction of virtual simulation training bases employs innovative approaches, mechanisms, and models in designing implementation plans. It aims to establish an innovative development model characterized by institutional leadership, corporate collaboration, and distinctive features, thereby fostering school-enterprise partnerships. These bases meet provincial and national standards for exemplary virtual simulation training facilities, enabling schools to effectively utilize information technology in experimental and practical teaching at the current stage.



Construction Goals

The exemplary virtual simulation training base will be developed into a comprehensive practical training facility integrating functions such as teaching, hands-on training, professional development, scientific research, competitions, and science popularization; it will also serve as a collaborative development platform between educational institutions and enterprises, as well as a platform for showcasing and promoting technological achievements, thereby enhancing the efficiency and empowering the high-quality development of modern vocational education.

Construction Principles

Driven by technology and integrating the virtual and the real, we aim to create a virtual simulation training environment characterized by perceptibility, immersion, interactivity, conceptualization capabilities, and intelligence. This initiative establishes a virtual simulation training system that leverages real-world scenarios to enhance virtual experiences, while simultaneously utilizing virtual elements to reinforce practical learning.

A tailored approach for each institution, adapting to local conditions: Develop targeted construction plans and implementation schemes.

Co-creation and sharing, complementary strengths: Promote integrated resource utilization and radiating resource sharing to avoid redundant construction and investment.

Integrated Training and Teaching Innovation: By organically combining the "1+X" certification system with the pilot credit bank reform, we optimize talent development and vocational training programs, reform the practical training system, and innovate practical training models.

Scientific management and standardized assessment: Establish a teaching effectiveness evaluation, assessment, and feedback mechanism that enhances students' self-directed learning and employability/entrepreneurship capabilities, while improving the quality of practical training and vocational education at all levels.



Virtual Simulation Center

Professional Virtual Simulation Training Center: Leveraging the most distinctive and advantageous disciplinary clusters of the institution, this center aims to establish a high-level professional virtual simulation training facility. It establishes a multidisciplinary, inter-institutional, and blended online-offline teaching and research model encompassing Internal Medicine, Surgery, Pediatrics, Obstetrics and Gynecology, Basic Nursing, Geriatric Nursing, and Traditional Chinese Medicine.

Public Virtual Simulation Training Center: Designed for general education and teaching courses using standard equipment.

Virtual Simulation Experience Center: Designed for immersive experiences, promotional activities, and science education.

Virtual Simulation Research and Development Center: Used for developing and debugging practical training resources, providing technical support for creating new resources and upgrading existing ones.

Facilities and Equipment: Desktop all-in-one operation machines, immersive LED large screens, multi-channel CAVE systems, large-space multi-user collaborative interaction systems, phantom imaging systems, holographic projection systems, etc.

System Interconnection

The system interconnection framework—comprising the National Teaching Resource Database System, National '1+X' Certificate System, National Credit Bank System, Smart Campus System, Academic Affairs Management System, Internship and Training Management System, and Virtual Simulation Training Teaching Management and Resource Sharing Platform—establishes a comprehensive architecture that effectively eliminates information silos and complies with national standards for campus cybersecurity protection systems.

www.cubemagic3d.com

Project Outcome

PATENT SUPPORT

Invention Patent: "An Integrated Training System for Enteral Nutrition Deficiency and Excess"; Software Copyright: "AI Decision Simulation Platform for Enteral Nutrition".

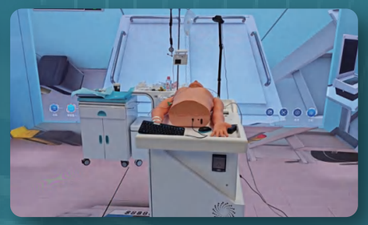
COOPERATION EFFECT

The pass rate for trainees' operational skills increased from 68% to 93%.

Clinical conversion rate: The rate of clinical operational errors decreased by 76% within 3 months post-training.

COURSE EXPERIENCE

Reservations for training sessions are now open, and the "West China Cloud Classroom" (search for "Enteral Nutrition VR Practical Training") is available for course experience.


West China Hospital of Sichuan University

West China Hospital of Sichuan University was founded in 1892. The West China School of Clinical Medicine of Sichuan University originated from the School of Medicine, College of Medicine, and Hospital of West China Union University established in 1914. In December 1993, the two institutions merged into a single entity, adopting a "two names, one leadership team" management system to achieve full integration of their institutional mechanisms. The medical school has now grown into a national-level center for the diagnosis and treatment of complex and critical illnesses in western China, a renowned higher medical institution in China, and a top-tier national base for medical scientific research and technological innovation, with comprehensive strength ranking among the nation's best and internationally advanced. It is one of the first national medical center establishment units in China and a pilot hospital for high-quality development jointly supported by the state and provincial authorities, striving to establish a national regional medical center.

Sichuan University West China Hospital collaborated with Cube Illusion to develop the "Virtual-Real Integrated Training System for Enteral Nutrition Management." This system recreates authentic ICU scenarios and employs an intelligent teaching and training simulator that combines virtual and real-world elements. Utilizing technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR), the system provides comprehensive training in real-world enteral nutrition procedures.

Real-Imaginary Combination Function

Evaluation, Assessment, and Post-Review Functions

An immersive learning experience









The First Affiliated Hospital of Soochow University



The First Affiliated Hospital of Soochow University was founded in 1883 (the ninth year of the Guangxu reign of the Qing Dynasty). It is one of the first tertiary Grade A hospitals designated by the Ministry of Health and a provincial-level key hospital directly under the Jiangsu Provincial Health Department, serving as the medical guidance center for the Southern Jiangsu region. The hospital has been honored with titles such as Jiangsu Provincial Model Civilized Unit, National Advanced Collective in Hospital Culture Construction, and Hospital Innovation and Reform Award. In the China Best Hospitals Ranking released by the Fudan University Hospital Management Research Institute, it has consistently ranked among the top 50 for five consecutive years and topped the 2013 China Top 100 Municipal Hospital Ranking.

In cooperation with Xiamen Cube Fantasy Technology Co., Ltd., we developed "An innovative end-to-end trauma simulation robot combined with CAVE immersive virtual environment for interactive display," which intelligently simulates clinical scenarios for operators to achieve an immersive operational experience.

The pass rate for assessments has been steadily increasing.

Standardized training for newly hired healthcare professionals: Reduced the learning cycle for emergency skills, with a 35% increase in pass rate.

The training achieves twice the results with half the effort.

The challenge of collaborative training for emergency medical teams has been successfully addressed, particularly through the intelligent post-event review function, which significantly enhances training effectiveness. Young physicians demonstrate markedly greater composure and efficiency during actual resuscitation scenarios.

project outcome And meaning

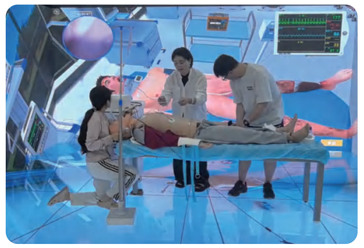
The Smart Emergency Care Benchmark of the First Affiliated Hospital of Soochow University

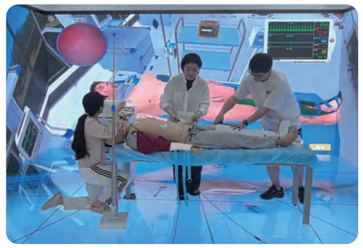
An intelligent, standardized, and quantifiable emergency training system has been established, serving as a benchmark model for cultivating emergency medicine professionals and enhancing medical quality.

Improved rescue efficiency

Advanced training for senior teams: Quarterly multidisciplinary joint drills have improved emergency response efficiency by 28%.







Precision Recognition Operation>

The end-to-end trauma simulation robot integrates multi-role coordination with CAVE immersive full-scenario simulation technology, enabling precise recognition and independent processing of each operator's hardware input signals.



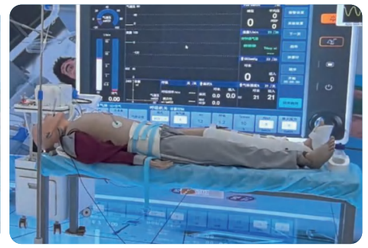


AI Intelligent Report Generation

The AI-powered intelligent dynamic calculation of physiological parameters enables trauma emergency response operations, providing real-time feedback on changes in the physiological states of various bodily systems. Students analyze and assess scenarios and disease progression, implementing corresponding rescue measures. The automated scoring system compares operational workflows and generates personalized training reports through intelligent analysis.







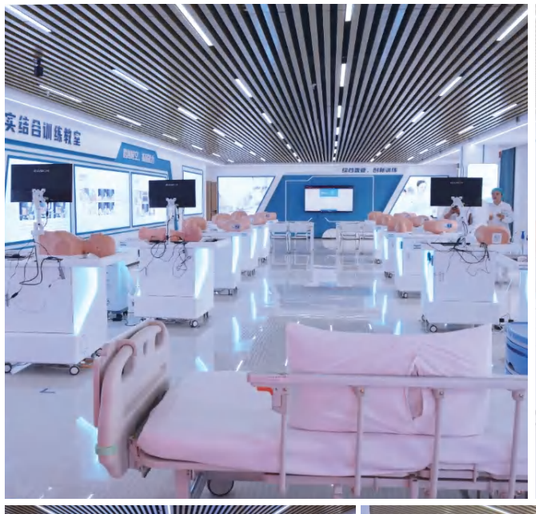
THE SECOND PEOPLE'S HOSPITAL OF AKSU PREFECTURE

Xinjiang Aksu Second People's Hospital was established in May 1983 and is located in the Dongcheng District of Aksu City. It is a regional-level Class II Grade A general hospital integrating medical care, teaching, scientific research, emergency services, prevention, and healthcare. The hospital serves as a designated medical institution for various levels of medical insurance in Aksu Region, Aksu City, the First Agricultural Division, and society at large, undertaking the medical treatment responsibilities for over 2.8 million residents of all ethnic groups in the region. It is also a member of the regional 120 medical consortium. The hospital operates two campuses: the main campus and the Nancheng Branch (Aksu Regional Tuberculosis Prevention and Treatment Hospital), with a planned capacity of 800 beds and an actual operational capacity exceeding 1,000 beds.

The training base of the Second People's Hospital of Aksu Prefecture in Xinjiang covers an area of 1,000 square meters. It was the first in the region to introduce the "Immersive 3D Stereoscopic Virtual Reality Interactive System". By leveraging virtual reality technology, motion capture technology, and 3D interaction technology, the system vividly presents abstract clinical knowledge in practical teaching scenarios.

Large footprint

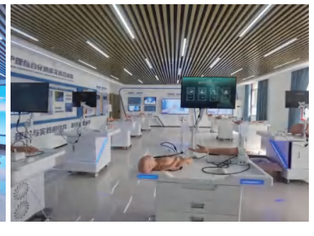
Abundant academic resources with distinct specialized features















Key Features of the Solution

① The theory, the abstract concept, and the concrete manifestation form a trinity.

② CAVE delivers a four-sided, immersive, and interactive teaching experience.

③ Multifunctional cardiopulmonary resuscitation training combining both real and simulated scenarios.

④ Comprehensive teaching and training for multimodal nursing with integrated virtual and real-world approaches through puncture techniques.

⑤ Multitechnology solutions empower geriatric rehabilitation care.

The hospital's approach and the issues that need to be resolved

① The content of virtual simulation experiment development needs further enrichment.

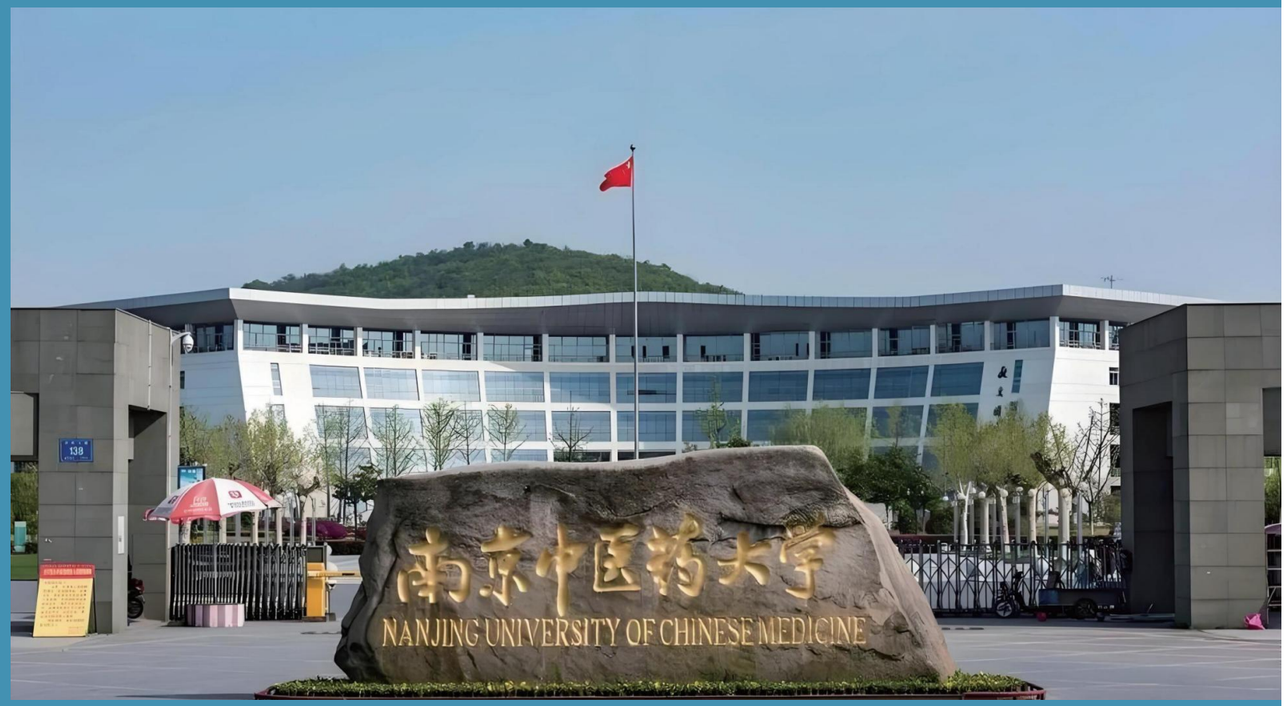
② Teaching and training resources are overly digitalized, with insufficient practical operational equipment.

③ The information technology infrastructure in the experimental building is inadequate.

④ The distribution of teaching and practical training resources across various departments is uneven.

⑤ The virtual simulation equipment and experimental teaching resources across various departments lack interoperability and integration.





Nanjing University of Traditional Chinese Medicine

Nanjing University of Chinese Medicine was founded in 1954, initially named Jiangsu Provincial Traditional Chinese Medicine Training School. It has undergone historical transformations including Jiangsu Provincial Traditional Chinese Medicine School, Nanjing College of Traditional Chinese Medicine, Jiangsu New Medical College, and Nanjing College of Traditional Chinese Medicine. The university is a national "Double First-Class" institution, a Category A institution under Jiangsu's High-Level University Peak Plan, and a jointly established institution by the Ministry of Education, the Jiangsu Provincial People's Government, and the National Administration of Traditional Chinese Medicine.

The university is one of the earliest established institutions of higher traditional Chinese medicine education in the country. It cultivated and supplied the first cohort of faculty members for the new China's higher traditional Chinese medicine education, compiled the first set of textbooks, and developed the initial version of the teaching syllabus. It made pioneering contributions to the establishment and promotion of the new China's higher traditional Chinese medicine education model and is hailed as the "cradle of higher traditional Chinese medicine education."

70%

The connection between theory and practice is not strong enough.

85%

Students hope to increase their opportunities for practical training.

65%

Students wish to enhance their skill acquisition.

The Four Core Technological Advancements

01 CAVE Immersive Interaction

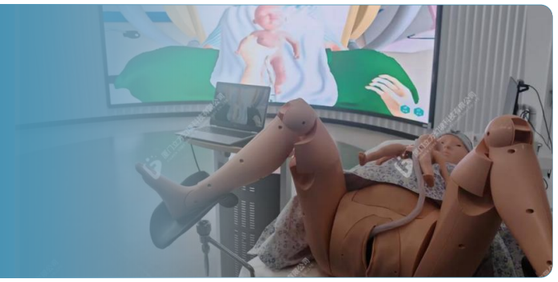
02 Real-Imaginary Combination Technology

03 AI-based intelligent recognition technology

04 Physiological Drive Technology

Virtual Simulation Training Base

Normal Delivery: A Comprehensive System Integrating Realistic and Simulated Elements> The maternal simulation mannequin features highly sensitive sensors for real-time operational feedback, intelligent voice interaction and scoring capabilities, and adjustable delivery speed. It incorporates a simulated vagina and cervical os, detects changes in the maternal model's position, and supports flexible positioning during delivery.





The Simulation Experimental Teaching Area is equipped with an arc-shaped LED system integrated with 3D simulation software, CAVE-based 3D simulation software, and a hybrid virtual-real delivery simulation system that combines cutting-edge nursing virtual reality technology. This innovative approach leverages virtual reality to overcome limitations in traditional nursing training, thereby enhancing teaching quality and cultivating high-caliber nursing professionals.

Integrated Emergency Virtual Simulation CAVE: A Four-Dimensional Immersive Training System

Through virtual simulation scenarios, students can experience authentic emergency rescue and nursing procedures, engaging in verbal and physical interactions with various characters within the virtual world. By establishing virtual communities and integrating augmented reality technology, virtual individuals can be "invited" into the classroom, enabling students to conduct on-site "nursing assessments and interventions." This approach enhances students' learning motivation and interest, thereby improving teaching effectiveness.









Quanzhou Medical College

Quanzhou Medical College is the only full-time public national demonstration (backbone) higher vocational institution specializing in medicine and healthcare in Fujian Province, established in 1934. Adhering to the school motto of "Sincerity for the Benefit of Society" and the educational philosophy of "Dedication to Excellence, Upholding Ethics in Medicine, Transmitting Values through Skills, and Serving the Community," the institution operates under a "one university, two campuses" structure with campuses in Luojiang and Nan'an, covering a total area of 954 mu. Its teaching and research facilities are valued at 145 million yuan, and it maintains 7 affiliated hospitals and 209 internship partners.

The university offers 20 specialized programs, including Clinical Medicine, Stomatology, and Nursing. It currently employs 508 full-time faculty members, among whom 209 hold associate senior professional titles or higher, and 280 possess master's degrees or higher. The institution boasts distinguished talents such as experts receiving the State Council Special Allowance and outstanding vocational education teachers recognized by the Huang Yanpei Award. As a pilot unit of the Ministry of Education's "Excellence in Medical Education and Training Program," the university has established three national key professional clusters, two training bases supported by central government funding, one national-level teaching team, and 12 pilot projects under the national 1+X certificate system.

01

Smart Teaching Training Program

By integrating the "Li-Xu-Shi Platform," a blended online-offline teaching model was implemented, enabling students to independently conduct practice and assessments at their seats to reinforce their acquired knowledge and operational skills.

02

Immersive CAVE Interactive Teaching and Training Session

By leveraging virtual reality technology, motion capture technology, and 3D interaction technology, abstract and difficult-to-understand concepts in teaching—or procedures involving invasive or private body parts—can be presented in a vivid and concrete manner.

03

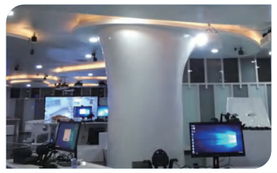
A teaching and training approach that combines theoretical knowledge with practical application

The system simulates various physiological responses of clinical patients and distinct tactile sensations during procedural operations. It incorporates clinical teaching experience and utilizes operational guidelines to enable intelligent training for fundamental clinical skills.

04

VR Interactive Experience-Based Teaching and Training Program

This approach breaks away from traditional observations of static or stationary objects. By presenting a dynamic, panoramic environment, it enhances students' learning interest, sparks their creativity, and improves their practical skills.





Smart Teaching Training Program



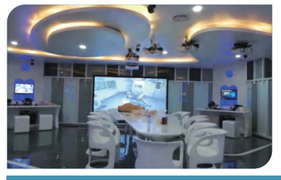


VR Interactive Experience-Based Teaching and Training Program





Immersive CAVE Interactive Teaching and Training Session





A teaching and training approach that combines theoretical knowledge with practical application







School-enterprise collaboration in developing virtual simulation software

① A virtual simulation software featuring modules such as "standard delivery" and "delivery mechanism" has been developed and implemented in actual teaching practices.
② Virtual simulation software for eight modules, including Phase II "Fetal Head Absorption Technique".

Helped win numerous awards

The teaching achievement "Three-Dimensional Development and Practice of Core Courses in Midwifery" was awarded the First Prize in Provincial Teaching Achievements and received multiple awards in vocational skills competitions. At the National Vocational College Group Vocational Skills Competition, the institution secured 3 first prizes, 4 second prizes, and 4 third prizes. At the Fujian Provincial Vocational College Group Vocational Skills Competition, it earned 8 first prizes, 12 second prizes, and 14 third prizes.

Exploring new approaches to experiential education

Leverage the expertise of professionals in specialized fields by utilizing learning platforms to organize forums on cutting-edge advancements in nursing, midwifery, and geriatric healthcare and management, thereby assisting freshmen in understanding professional development trends and formulating career plans.

Promotion of Technological Achievements

The virtual simulation software for midwifery techniques has garnered widespread attention from peers in midwifery programs across vocational colleges nationwide. Since its establishment, the training base has attracted over 30 groups of visitors from more than 30 domestic and international universities, totaling nearly 500 individuals, including representatives from the Auckland University of Technology in New Zealand, for visits and exchanges. Provincial and municipal leaders have also conducted multiple inspections and provided guidance.

Chuxiong Medical College

Chuxiong Medical College is located in Chuxiong, the heartland of central Yunnan, a region renowned for its three world-class titles: "Hometown of Dinosaurs," "Hometown of Eastern Humanity," and "China's Grand Garden of Yi Culture." As a prestigious medical institution deeply rooted in Chuxiong Yi Autonomous Prefecture of Yunnan Province, the college has undergone over seven decades of development since its predecessor, Shanghai Health School, was established in 1950. After relocating to Chuxiong in 1970, the institution was renamed Yunnan Chuxiong Health School and was upgraded in 2006 to its current status as Chuxiong Medical College, becoming a pivotal hub for medical education in the region.

The school has been honored with numerous national accolades, including the "Advanced Collective for Ethnic Unity and Progress," "Model Workers 'Home," "Demonstration Unit for Energy Conservation and Emissions Reduction in Public Institutions," "Model Workers' Library," and the "Special Award for Promoting Voluntary Blood Donation." At the provincial level, it has received honors such as "Civilized Unit," "Civilized School," "Model School for Creating a Safe Campus," "Model School for Introducing Integrity Culture on Campus," and "Model Teaching and Education Post. "

Layout of Functional Zones in the Training Base

01 Clinical Puncture: An Intelligent Training Laboratory Combining Practical and Theoretical Aspects

02 Multi-channel immersive CAVE intelligent training laboratory

03 Comprehensive Training Laboratory Combining Virtual and Real Elements for Intelligent Training

04 Comprehensive Nursing Puncture and Injection Training Laboratory: An Intelligent Facility Combining Practical and Theoretical Elements

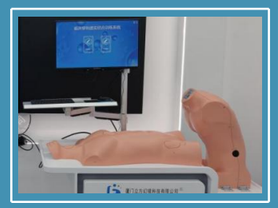
05 Public Virtual Simulation Training Center

06 Virtual Simulation Research and Development Center



Virtual Simulation Training Base and OSCE Examination Center:

Covering an area of 1,000 square meters, this training base integrates virtual simulation technology for practical training with OSCE examinations. Leveraging modern information technology, it provides a highly realistic clinical environment for learning and training. By combining the OSCE examination center, it optimizes the OSCE examination process and establishes a standardized, automated OSCE examination system, thereby enhancing efficiency and fairness.





Clinical Puncture: An Intelligent Training Laboratory Combining Practical and Theoretical Aspects

The four combined virtual-realistic procedures—thoracentesis, lumbar puncture, abdominal puncture, and bone marrow aspiration—utilize integrated virtual-realistic technology and force feedback technology to simulate authentic puncture environments and procedural steps, providing a clinically realistic tactile sensation during the procedure.

Multi-channel immersive CAVE intelligent training laboratory

The system primarily consists of pre-hospital and in-hospital emergency modules covering various case scenarios such as drowning, traffic accidents, and park incidents. After selecting a case, the user enters the corresponding scenario and simulates disease progression. Medical professionals analyze and assess various situations and clinical changes, implementing appropriate rescue measures accordingly.









Comprehensive Training Laboratory Combining Virtual and Real Elements for Intelligent Training

The four combined virtual-realistic procedures—thoracentesis, lumbar puncture, abdominal puncture, and bone marrow aspiration—utilize integrated virtual-realistic technology and force feedback technology to simulate authentic puncture environments and procedural steps, providing a clinically realistic tactile sensation during the procedure.





Comprehensive Nursing Puncture and Injection Training Laboratory: An Intelligent Facility Combining Practical and Theoretical Elements

The complete injection procedure with peripheral device simulation can be performed, involving injections in multiple sites including the buttocks and arms.

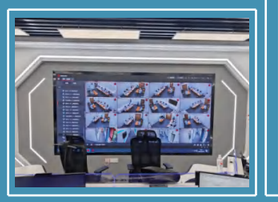
The selection of the injection site and the integrated force feedback system allow the operator to perceive the resistance encountered when the needle enters the muscle during injection.





Public Virtual Simulation Training Center





Virtual Simulation Research and Development Center

significance of the project

① Solving Teaching Challenges: Address the teaching challenges in traditional medical practical training.

② Enhancing students' skills and academic performance: Enhance students' award-winning performance in the national virtual simulation innovation competition, while strengthening their clinical thinking and job competency.

③ Improving the quality of talent: Cultivate technically skilled professionals who meet industry development needs and possess high clinical competence.

④ Empowering Teacher Development: Enhance teachers' capabilities in developing teaching resources and advancing digital teaching practices, thereby supporting their efforts to win awards in teaching competitions.







Zhengzhou Health Vocational College

school overview

Zhengzhou Health Vocational College is a public full-time ordinary higher vocational institution approved by the People's Government of Henan Province and registered with the Ministry of Education of China. Established in 1951, the college covers an area of 624 mu (approximately 104 acres) and boasts 143 practical training laboratories. It comprises teaching units such as the Department of Nursing, Department of Rehabilitation, Department of Basic Medicine, and the College of Sports Health, offering 15 majors including Nursing, Pharmacy, and Traditional Chinese Medicine Rehabilitation Technology. Students have won over 20 awards in the National Vocational College Skills Competition (in Nursing Skills and Rehabilitation Therapy), while the college has repeatedly secured first-place team awards in the Henan Provincial Health Commission Skills Competitions.







Three Centers and Two Platforms

The Traditional Chinese Medicine Rehabilitation Skills Simulation Training Center comprises three centers (the Virtual Simulation Research and Innovation Center, the Rehabilitation Assessment Virtual Training Center, and the Hybrid Force Feedback Center) and two platforms (the Rehabilitation Therapy Virtual Training Platform and the Virtual Simulation Resource Sharing Platform), encompassing a variety of rehabilitation techniques and teaching methodologies.

Zhengzhou Health Vocational College

Virtual Simulation Research and Development Center

Leveraging the National Joint Consortium for the Construction of Virtual Simulation Bases in Health Vocational Education, we will promote collaborative development of standardized virtual teaching resources between schools and enterprises, establish a virtual simulation research and innovation platform for Traditional Chinese Medicine (TCM) rehabilitation technologies, and provide tools for VR scene editing, case library construction, and interactive logic design. This initiative aims to reduce the technical barriers for teachers in independently developing courses, forming a closed-loop system of "research-development-application-promotion" that supports the digital transformation of regional health vocational education.





Virtual Simulation Resource Sharing Platform

Composed of a platform management system, data statistics system, teaching evaluation system, virtual simulation library, and shared resource library, it supports adaptive display on PCs, tablets, and mobile devices. The software holds the copyright for a three-dimensional virtual interactive system for rehabilitation clinical practice and treatment.

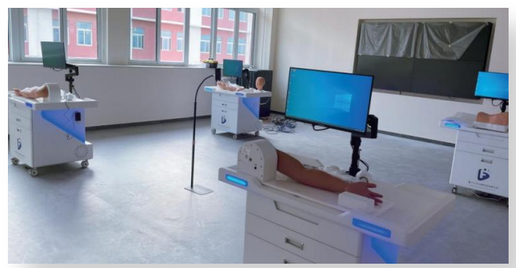






significance of the project

- Simulation of a Real Clinical Environment
- Application of Virtual Simulation Technology
- Real-time Evaluation and Data Analysis
- Technology Empowers Traditional Chinese Medicine
- Simulation Facilitates Rehabilitation







HubeiVocationaland Technical College

Hubei Vocational and Technical College is a comprehensive public full-time higher vocational institution independently established with approval from the Ministry of Education of China. It holds numerous prestigious honors, including National Model Higher Vocational College, National Demonstration Base for High-Skilled Talent Cultivation, National Model Unit for Employment Services among Higher Vocational Colleges, Hubei Province's Best Civilized Unit, Advanced Unit in Party Building Work, Advanced Unit in Ideological and Political Education in Higher Education Institutions, Hubei Province's First Batch of College Student Entrepreneurship Demonstration Bases, Hubei Province's Entrepreneurship Incubation Demonstration Base, and Advanced University in Serving Hubei's Economic and Social Development.

In 2003, the Nursing Practical Training Base was designated as a "Training Base for Skilled and In-demand Talents in the Nursing Field" by six ministries including the Ministry of Education and the Ministry of Health. In 2006, it was approved by the Ministry of Education and the Ministry of Finance as a "National Vocational Education Practical Training Base."

Students hope to increase their opportunities for practical training.

85%

The teacher believes that teaching resources are limited.

70%

The connection between theory and practice is not strong enough.

70%







The Virtual Simulation Training Base at Hubei Vocational and Technical College covers an area of approximately 1,050 square meters. To ensure the effective operation of the base and promote collaboration between the institution and enterprises,

To achieve mutual success, Hubei Vocational and Technical College and Xiamen Cube Fantasy Technology Co., Ltd. have pioneered a "two-way collaboration" mechanism in projects such as the construction of virtual simulation training bases, resource development, and online courses. This initiative establishes a new model integrating science and education, fostering deep integration between next-generation information technology and teaching practices.

The virtual simulation training base comprises six centers: knowledge-guided training, skills training and assessment, practical simulation, industry-academia-research-application integration, ideological and political education, and comprehensive management. It encompasses functions such as innovative teaching, scientific research, administrative operations, and social services.









Dali Nursing Vocational College

Dali Vocational College of Nursing is a full-time public higher vocational college at the associate degree level specializing in medicine and healthcare. Its predecessor was the Dali Health School of Yunnan Province, established in 1953. Through seven decades of educational development, it has evolved into a higher vocational college renowned for its strengths in nursing and optometry technology, with distinctive features in traditional Chinese medicine rehabilitation techniques and health management, while integrating multidisciplinary approaches in the field of medicine and healthcare.

The campus covers an area of 462 mu (approximately 77 acres) with a current construction area of 139,000 square meters. It offers 12 academic programs: Nursing, Midwifery, Acupuncture and Massage Therapy, Rehabilitation Therapy Technology, Traditional Chinese Medicine Rehabilitation Technology, Traditional Chinese Medicine Health Preservation, Health Management, Geriatric Health Care and Management, Optometry Technology, Visual Training and Rehabilitation, Medical Laboratory Technology, and Medical Imaging Technology. The institution is dedicated to establishing a specialized cluster of geriatric health care management programs supported by nursing education. It employs nearly 300 faculty and staff members, enrolls 6,000 full-time students, and has 2,000 students pursuing continuing education. The campus has established a comprehensive "Three Centers and Three Bases" system integrating teaching, research, and practical training: the Public Basic Training Center, Professional Basic Training Center, Mental Health Education and Counseling Center, Nursing Training Base, Optometry Technology Training Base, and Rehabilitation Technology Training Base. The total value of experimental and training equipment exceeds 49 million yuan, meeting the fundamental requirements for a digital campus. The library houses a collection of 320,000 volumes. The institution operates four affiliated hospitals, ten teaching hospitals, and 71 teaching and internship bases both within and outside the province, laying a solid foundation for cultivating highly skilled healthcare professionals with strong practical competencies.



- The 3D virtual reality simulation learning system supplements the original teaching methods, and makes students familiar with the process and master the norms by presenting some blind spots that cannot be displayed by traditional teaching methods in the form of 3D virtual interaction.

- The immersive 3D ring-screen interactive wall virtual simulation system supports multiple interaction modes including VR, AR, and mixed reality. It enables teachers to manage instructional activities while allowing students to engage in immersive practical training, thereby advancing educational innovation.

- VR/MR Mixed Reality Practical Teaching System delivers comprehensive visual immersion with zero operational or experimental risks, providing users with the most immersive experience. It cultivates nursing students' clinical competence and clinical thinking skills.

Advantages and Features

Facilitating the digital transformation of educational institutions' teaching processes

Strengthen the development of students' core competencies

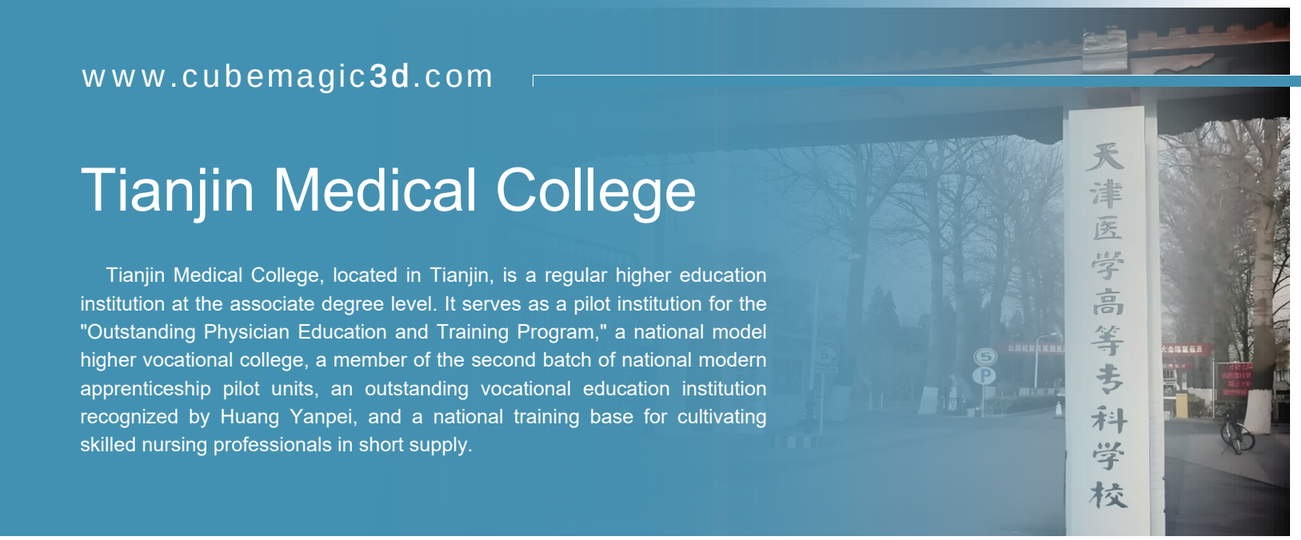
The ability to integrate resources from multiple disciplines

Project成果 Presentation







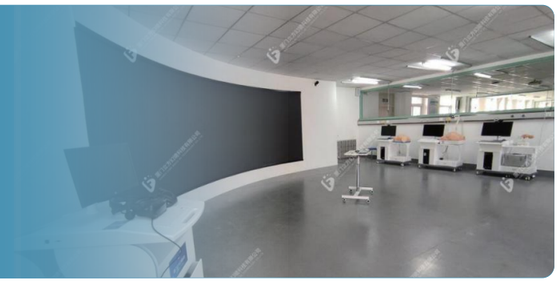
Tianjin Medical College

Tianjin Medical College, located in Tianjin, is a regular higher education institution at the associate degree level. It serves as a pilot institution for the "Outstanding Physician Education and Training Program," a national model higher vocational college, a member of the second batch of national modern apprenticeship pilot units, an outstanding vocational education institution recognized by Huang Yanpei, and a national training base for cultivating skilled nursing professionals in short supply.

Midwifery Virtual Simulation Training Program

Immersive 3D stereoscopic experience

Virtual Reality Interaction System> Development of an arc-shaped LED ultra-wide-screen augmented reality interaction system, which integrates motion capture software for interaction on top of an immersive display system, and incorporates virtual simulation software for multiple specialties including obstetrics, pediatrics, basic nursing, dentistry, rehabilitation, and geriatrics.





VR Virtual Reality Training System> VR virtual reality technology utilizes computer technology to create and simulate realistic world scenarios, enabling users to immerse themselves in these environments and perform interactive operations. The system generates authentic clinical or extreme environments, allowing training within predefined virtual settings through immersive interaction that combines education with entertainment to enhance learning effectiveness.

Nursing Care for Patients with Respiratory Diseases

Through this system, instructors can publish medical professionals' demonstrations on the Vocational Education Cloud Platform, allowing students to engage with the operational procedures for caring for COVID-19 patients—including wearing protective gear (e.g., gloves, shoe covers, masks, caps, and goggles)—all presented in a 360-degree three-dimensional format. Meanwhile, students can use the tablet-based system to observe demonstrations and learn key precautions during various procedures, such as the proper method for wiping the throat with swabs.







Xinjiang Bazhou Health School

Bazhou Health School is located on Jiaotong West Road in Korla City, Xinjiang. It is the only full-time ordinary secondary medical vocational school in the Bazhou region that integrates academic education, on-the-job training, skill certification, and employment services. The school is a national key secondary vocational and technical school, a national demonstration school for the reform and development of secondary vocational education, and a model secondary vocational school at the autonomous region level.

Xinjiang Bazhou Health School has actively responded to the policy calls from the national education authorities regarding advancing the modernization of vocational education, strengthening practical teaching, and integrating industry with education. Closely aligned with the regional healthcare development plan and the market demands of the nursing industry, the school's teaching quality and talent cultivation standards directly impact the improvement of medical service standards and public health protection. Against the backdrop of rapid development in the healthcare sector, the school has launched the Nursing (VR) Virtual Simulation Training Laboratory construction project.

The Nursing (VR) Virtual Simulation Training Base features an intelligent interactive nursing simulation laboratory integrating virtual and physical environments, as well as a comprehensive scenario-based emergency training laboratory. Incorporating cutting-edge virtual nursing simulation technology, it aims to address the three major challenges of traditional nursing training—"limited resources, high risks, and restricted scenarios" —through virtual reality solutions. The facility establishes a novel training model characterized by "an intelligent teaching platform, virtualized skill development, and customized learning environments," fostering the cultivation of high-quality nursing professionals capable of meeting the demands of the modern era.

Significance of the project

01 personnel training

02 Education Improvement

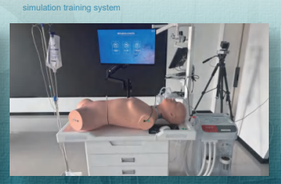
03 Industry Impact

04 addressing the core issue directly

Intravenous Puncture Training System Combining Real and Virtual Elements



Comprehensive catheterization training system combining virtual and real-world scenarios; Scenario-based integrated emergency simulation training system





Virtual Simulation Integrated Management Platform













