Case Studies

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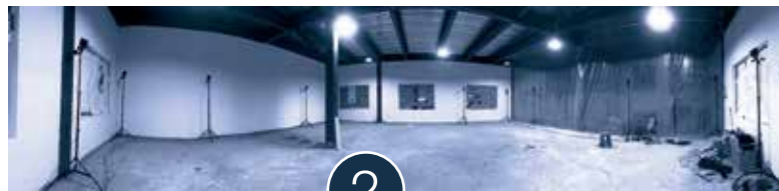**Consumer Electronics Show (CES),** Las Vegas, the United States

Military simulation training

②

University of Science and Technology of China

Positioning and tracking of multiple virtual reality helmets and controllers, to realize large-space virtual interaction of multi-person free movement through real-time data acquisition of the interactive devices' change of position and angle, see "Siggraph2018" for relevant research findings.

③

Laval Virtual, Laval, France

Connected with Longtek MakeReal3D software, demonstrating industrial virtual simulation on site

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Motion Capture Camera

MARS Series

Possibly the most cost-effective optical motion capture solution at present.

142 mm

126 mm

104～124.5 mm

PoE+ Pinterface

Model	Resolution	No. of Pixels	Frame Rate	Latency	FOV	Interface
Mars 1.3H	1280×1024	1.3MP	240HZ	4.0ms	57°×44°	GigE/PoE
Mars 1.3HW	1280×1024	1.3MP	240HZ	4.0ms	80°×70°	GigE/PoE
Mars 2H	2048×1088	2.2MP	380HZ	2.4ms	69°×40°	GigE/PoE
Mars 2HW	2048×1088	2.2MP	380HZ	2.4ms	104°×55°	GigE/PoE
Mars 4H	2048×2048	4.1MP	180HZ	5.2ms	52°×52°	GigE/PoE

We also offer customized models, please email us for more information.

ORBIT

Plug and play, no calibration required.

- Turn on and play, no calibration required.
- Fast mounting bracket is available, which can be installed directly on TV.
- Close-range models is available for desktop ultra-close-range motion capture.

PLUTO

Motion capture system designed for entry-level developers, as well as commercial and consumer-grade product development & integration

- Highly cost-effective
- Small, light and portable
- Track moving objects at constant speed (5m/s), to meet the capture requirements for millimeter accuracy
- Support IEEE 802.3af/at standard POE system, and provide optional network of power supply system for developers without link restriction

Virtual Reality Accessories

Optional accessories

- Virtual Reality Controller
- Helmet position tracker

Product Features

- Interactive devices for virtual reality solutions
- High-precision 6DoF (position, direction) tracking
- Improved immersive experience
- Position tracking with sub-millimeter accuracy
- Integrated with straight screen, circular screen, arc screen, CAVE and other equipment
- The data supports VRPN, which can be directly transmitted to Unity or Unreal.

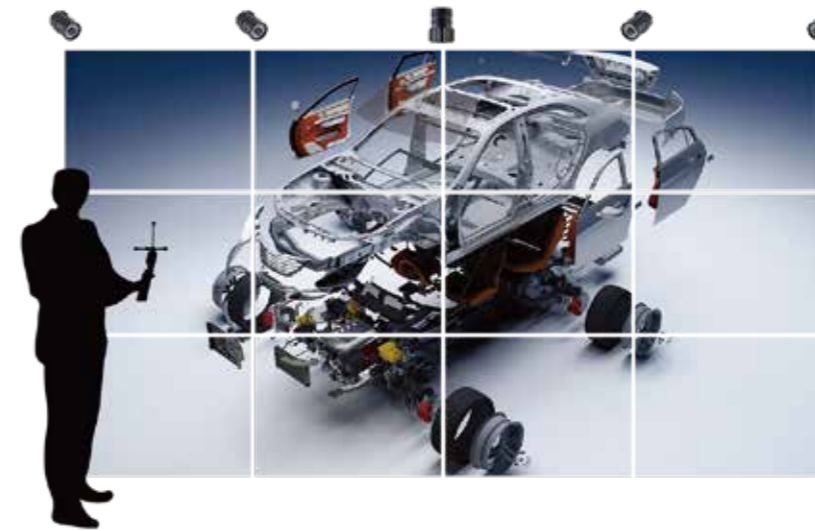Virtual Reality Controller

Helmet position tracker

NOKOV

Application in Virtual Reality

Integration of NOKOV Motion Capture System with Straight Screen

Integration of NOKOV Motion Capture System with CAVE

Integrated Devices

- HMD
- Straight/circular/arc screen
- CAVE

System Functions

- Provide 6DoF data for HMD
- Provide 6DoF data for controllers
- Provide 3D coordinates information of whole-body movement

Solutions

- Virtual simulation
- Virtual Reality Entertainment in Large Space
- Teaching Practice of Smart Education Military simulation training

Data Input Software

- VRPN
- Matlab
- Unreal Engine
- Unity
- Motion Builder