OISHI LAB.

［Spatiotemporal Modeling and Visualization］

Dept. of Informatics and Electronics / Advanced Mobility Research Center

http://www.cvl.iis.u-tokyo.ac.jp/

Spatiotemporal Media Engineering

III
EE Dept. CCS

Capture, and Charm

High precision measurement and Virtual representation

◆Digital Archiving: High precision modeling and sensor development

There are many important cultural heritages in the world. Digital recording of these heritages and utilization of the recorded data for maintenance and analysis are important issues.

We are developing methods for geometric and photometric modeling of the real world, such as alignment and merging algorithms for large-scale data. Using our methods, we captured cultural heritages such as Great Buddha of Kamakura, Nara, and Angkor ruins, Bayon Temple, Angkor Wat, and Preah Vihear.

We research technology for high-quality modeling and sensor-robot integration for automation of the large-scale modeling.

◆ Cyber Archeology: Shape-analysis and reconstruction based on digital data

Egypt: Solar Boat

◆ Cloud Museum: Virtual-Reconstruction by Mixed Reality

Spatiotemporal Visualization using MR Mobility system

◆ ITS: Large-scale city space modeling
◆ Robotics: Support system for robot operation using VR

Automation of the large-scale modeling

Balloon Sensor

Fig. Measurement by the Cambodian engineer (Left), Rail Sensor and Rover Sensor under development (Right)

Angkor Vat（Cambodia）