

Day2 The 11th International VR Conference

“The 11th UC-win/Road Conference” and “The 4th International VR Symposium” were held on Day2, With “Technical Support Session” by our development engineers

On the second day, the 11th UC-win/Road Conference and the 4th International VR Symposium started in the space separated from the large room from morning. UC-win/Road Conference progressed with two sessions, Main Session and Driving Simulator Session from afternoon. With the technical support sessions held in different rooms, our development engineers were able to take care of customers with various solution queries including UC-1, UC-win, and BIM&VR.

■ Main Session

Firstly, “Current condition of development and future expansion of UC-win/Road Ver.5 and VR-Studio” was presented by FORUM8 staff. It was introduced in the case studies of system development, the project adopted by METI (Ministry of Economy, Trade and Industry) “Consensus formation support via cloud computing”, the new services in 3D scan, point cloud modeling, and 3D modeling with the new functions of UC-win/Road Ver.5. In addition, the expansion of cloud SaaS function, the movement of pedestrian crowds, FBX animation, the sliding type of presentation function were mentioned as the development for Ver.6. Finally, the new functions and current development condition of VR-Studio™ Ver.1.3 were introduced alongside with the demonstration of the latest features such as intersection and traffic functions.



Case studies of UC-win/Road and VR were presented by different type of professionals

The first speaker of the afternoon special lecture was Mr. Philippe Marsaud, Technical manager of BMIA in France, who has been involved in the consultancy works of monitor and control system for fifteen years. He explained the advantage of linking monitoring system SCADA with UC-win/Road with the theme “Uses of UC-win/Road in a 3D simulation software for training Road and Tunnels operators”. He said “The first version of this system made use of a game engine but the representation was not realistic hence

I decided to adopt UC-win/Road. We will expand the system with the use of plug-in and spread the complete



■ Mr. Philippe Marsaud, Technical manager, BMIA system for the tunnel management both in and out of France in future.”



Next, in the special lecture by Professor Lee Dongmin, Korea Transport Institute (KOTI) “Traffic studies considering the aspect of traffic users” followed. He talked about the driver’s perception and traffic system and he explained that three factors: user, vehicle, and environment interlock. He said that the VR allows the quick judgment and action through clear perception and he found it is suitable for the measurement of driver’s perception. He also mentioned this method would be useful for clarification and research of driver’s thinking process. The actual case study of



UC-win/Road was introduced via movie and the effectiveness of UC-win/Road for clarification of driver's perception was explained.



■ Professor, Lee Dongmin, Korea Transport Institute (KOTI)

Professor Nashwan Dawood, Teesside University in UK lectured on the theme "Energy analysis and reduction in the built environment: the case for BIM and visualization technologies" and he introduced the utilization of ICT (BIM, integrated database, visualization technologies, and GIS) for the building environment. He mentioned that it is used for the existing buildings and it is aimed that about 20 percent of CO2 would be reduced.



■ Professor, Nashwan Dawood, Teesside University

The first speaker of the latter half of the session was Mr. Michael Manore, TRB Visualization in Transportation Committee with the theme of "The

growth of the 3D visualization Market in the USA". Mr. Manore, who has been involved with the visualization of the civil engineering design for a long time, introduced the intelligent bridge with the sensor such as temperature and vibration.



■ Mr. Michael Manore, TRB Visualization in Transportation Committee

Next up was the special lecture of Mr. Keiichi Nishikawa, LBS project manager, RFID LBS system engineering center, Electronic system project department, Mitsubishi Electric Corporation lectured with the title of "Modeling using data measured by MMS for maintenance management". The VR data of "Umihotaru" with the point cloud measurement and the system which allows the detection of the traffic sign and manhole and transformation to the ledger was introduced. The



■ Mr. Keiichi Nishikawa, LBS project manager, RFID LBS system engineering center, Electronic system project department, Mitsubishi Electric Corporation

void and the point to be repaired can be specified through the linkage of underground radar with MMS and it can be used for the checking and maintenance of the tunnel.

At the end of this session, our staff explained the function of UC-win/Road point cloud plugin and 12D Model plugin following the lecture of Mr. Nishikawa and demonstrated these features.

■ Driving Simulator Session

The first special lecture of DS session was conducted by Associate Professor Muneo Yamada, Meijo University with the theme of "Utilization of driving simulator for detecting driver's condition". Regarding the traffic accident and its main cause, driving capability (perception, judgment, and operation), he explained the detection method of the depressed consciousness and the existing waking method, the waking method with "the supply of fragrance" under investigation and he also reported on the experimental results of the detection.

Vibration, gum, coffee, and buzzer sound were used for the existing research, but he mentioned "we focused on the olfactory stimulation by supplying the fragrance which doesn't interfere with the driving



■ Associate Professor, Muneo Yamada, Meijo University