Gwangju Institute of Science and Technology

Official Press Release (https://www.gist.ac.kr/)

Professor Kwanghee Ko's research team won the grand prize in the software category at the CDE Competition

☐ Gwangju Institute of Science and Technology (GIST, President Kiseon Kim) School of Mechanical Engineering Professor Kwanghee Ko's research team won the grand prize in the software category at the 20th CDE Competition hosted by the Korea CDE Association.

　∘ The Computational Design and Engineering (CDE) competition is meant to discover the best CDE content, CDE software, and CDE makers. This event was held to expand the base of domestic related fields and to raise public awareness of CDE and to lay a foundation for the growth of CDE related industries in Korea.

☐ Professor Kwanghee Ko's research team is called "SMR (Smart Mixed Reality)" (GIST Ph.D. student Joon-ho Choi, advisor Professor Kwanghee Ko, Emeritus Professor Kwan Heng Lee, Soft Hills Director Chang-hoon Yeo, Samsung Heavy Industries Pro Jung-seo Park, and Marine Tech CEO Won-don Kim) participated in the competition and received the grand prize from the Ministry of Science and ICT. The awards ceremony was held in February at Phoenix Park in Pyeongchang, Gangwon-do.

　∘ Under the theme of 'Smart Mixed Reality for the Installation and Inspection of Offshore Plant Pipelines,' the research team minimized errors in the production and design process for offshore plant industry and provided

software and modules for efficient installation inspection (▲ model-based design simulation technology ▲ stable location tracking technology for indoor/outdoor environments ▲ lightweight mixed reality platform for offshore plant processes ▲ mixed reality based piping installation support technology ▲ mixed reality based design process inspection) along with descriptive demonstration videos.

☐ SMR team advisor Professor Kwanghee Ko said, "The developed software can communicate directly with the user to help visualize information, such as verification, installation status, and simulations, hrough mixed reality, which can improve the efficiency of the installation and inspection process. In addition, it can be applied to other non-manufacturing sectors, and it is expected to contribute greatly to the economic and industrial aspects of related industries."

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