

**Gwangju Institute of Science and Technology**

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

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 **Release Date** 2020.02.11

**Professor Yong Gu Lee's research team**

**won the 2020 Gaheon Academic Award**

□ Gwangju Institute of Science and Technology (GIST, President Kiseon Kim) School of Mechanical Engineering Professor Yong Gu Lee's research team won the '2020 Gaheon Academic Award' at the Korea CDE Conference Winter Conference held at Phoenix Park, Pyeongchang, Gangwon-do, from February 5-7, 2020.

∘ The Gaheon Academic Award is hosted by Korea CDE Association and sponsored by the Gaheon Shindo Foundation. The winner is selected among the best papers published by Korea CDE within the past year, which is recognized for its high academic contribution and is awarded with a prize of 10 million won.

□ Professor Yong Gu Lee's research team was selected as the best paper for 'Development of Hand Signal Recognition Algorithm Using Light Rods as Signal Indicators' for the development of autonomous driving cars that recognize hand signals by safety personnel and police officers. GIST master's student Joo-sun Yoon and Ph.D. student Sung-jae Lee participated as co-authors.

∘ In accidents or construction sites, a vehicle's route is determined by the instructions of safety personnel without following formal instructions such as traffic lights and road signs. Therefore, accurate hand signal recognition is essential for the development of autonomous vehicles. The research team proposed an artificial intelligence algorithm that recognizes the instructions performed by traffic safety personnel for the development of autonomous vehicles in three to five stages with minimal driver intervention.

□ Professor Yong Gu Lee said, "The core technology of hand signal recognition algorithm is to quickly and accurately recognize hand signals such as straight, turn, and stop. I hope Korea's autonomous vehicle development technology will take a step forward through with the artificial intelligence algorithms proposed by my research team."

∘ A research team led by Professor Yong Gu Lee has been conducting research (project name: Development of Atypical Dynamic Characteristics Open Data Set and Cognitive Processing Technology Affecting Autonomous Driving) related to mobility and artificial intelligence since 2018 for an ICT convergence source technology project supported by the Ministry of Science and ICT.



▲ Professor Yong Gu Lee's research team receives the 2020 Gaheon Academic Award