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## **GIST School of Electrical Engineering and Computer Science students win the 26th Human Tech Paper Awards**

- GIST (President Kiseon Kim) School of Electrical Engineering and Computer Science masters students Da-hyun Kim (Professor Jonghyun Choi, advisor) and Young-jin Yoo, Joo-hwan Ko, Young-jae Kim (Professor Min Song Young, advisor) won the Bronze and Encouragement Awards at the 26th Human Tech Paper Awards held by Samsung Electronics.
  - The Human Tech Paper Awards is a competition for domestic and foreign universities held every year since 1994 by Samsung Electronics for graduate students and high school students to find a map of scientific ideas that will become the cornerstone of scientific advancement for the 21st century.
- Unlike other general binary networks that use human-designed architecture, student Da-hyun Kim researched "Learning Architectures for Binary Neural Networks." Neural architecture search, one of the machine learning techniques, was successful in creating binary networks using computer-learned architectures. When comparing the binary network obtained in the same environment, it had superior performance than that of the XNOR-Net, which was recently acquired by Apple for about 240 billion won.
- Student Da-hyun Kim said, "I would like to thank Professor Jonghyun Choi and members of the lab for always supporting me to do good research."

- Students Young-jin Yoo, Joo-hwan Ko, Young-jae Kim researched "Flexible, Large-Area Covert Polarization Display Base on Ultra-thin Lossy Nanocolumns on a Metal Film." The polarized hidden display, which can be realized through a very complicated fabrication method, was created in a highly efficient process through self-aligned nano-columns, allowing it to be manufactured on large flexible substrates with the potential to produce more practical polarizing displays. In particular, the fact that it is possible to realize various colors and to also detect changes in the external environment was evaluated highly by the judges.
  
- Student Young-jin Yoo said, "First of all, I would like to express my sincere gratitude to Professor Min Song Young for guiding us in the right direction. I would also like to thank fellow lab members for helping each other and for being great researchers."
  
- The top prizes for the university division included, gold, silver, and bronze as well as the grand prize and encouragement award. Winners were also awarded cash prizes with the bronze award winners receiving 5 million won and the encouragement award winners receiving 2 million won.

