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강연제목: 뇌-컴퓨터 인터페이스 기술: 연구실 밖으로 Brain-Computer Interface: From Lab to Real World

Abstract:

Recently, there have been significant advancements in brain-computer interface (BCI) or brain-machine interface (BMI) technologies. Its commercialization is also actively driven by companies such as Neuralink. BCI or BMI requires the development of both hardware and software. Hardware includes the device and component that can directly be in contact with the brain and nervous system, forming the very interface between biological and artificial systems. Software includes the signal processing and analysis to decode brain signals with high accuracy. This talk addresses what huddles need to be overcome to bring the BCI hardware technologies to the real world, including the regulations in Korea and the device reliability over a long time period.

Brief Biosketch

Sohee Kim received her BS and MS degrees in mechanical engineering from KAIST in 1998 and 2000, respectively, and PhD degree in mechatronics from University of Saarland in 2005. From 2006 to 2009, she was a postdoctoral researcher in electrical and computer engineering at University of Utah. From 2009 to 2015, she was a professor at GIST. Since 2015, she has been a professor with the Department of Robotics and Mechatronics Engineering at DGIST. Her research interests include brain interfaces, peripheral nerve interfaces, and soft bioelectronic devices.