

Computational NeuroEngineering (CoNE) Laboratory @ HYU BME Dept., Hanyang-U

Lab Members (Sep. 2018)

Professor, Lab. Director



Activities

Publications

More than 150 papers have been published in SCI(E)-indexed journals (as of Oct. 2018) Selected recent publications published in 2018

- Jaeyoung Shin and Chang-Hwan Im*, "Performance Prediction for a Near-Infrared Spectroscopy Brain-Computer Interface Using Resting-State Functional Connectivity of the Prefrontal Cortex," International Journal of Neural Systems, 2018. Top 5%
- Chany Lee and Chang-Hwan Im*, "New Strategy for Finite Element Mesh Generation for Accurate Solutions of Electroencephalography Forward Problems," Brain Topography, 2018. Top 20%
- Do Yeon Kim, Chang-Hee Han, and Chang-Hwan Im^{*}, "Development of an electrooculogram-based humancomputer interface using involuntary eye movement by spatially rotating sound for communication of locked-in patients," Scientific Reports, 2018. Top 10%
- Chang-Hee Han, Han-Jeong Hwang, Jeong-Hwan Lim, and Chang-Hwan Im*, "Assessment of user voluntary engagement during neurorehabilitation using functional near-infrared spectroscopy: a preliminary study," Journal of Neuroengineering and Rehabilitation, 2018. Top 5%
- Jaeyoung Shin, Jinuk Kwon, Jongkwan Choi, and Chang-Hwan Im^{*}, "Ternary Near-Infrared Spectroscopy Brain-Computer Interface with Increased Information Transfer Rate Using Prefrontal Hemodynamic Changes During Mental Arithmetic, Breath-Holding, and Idle State," IEEE Access, 2018. Top 20%
- Jaeyoung Shin, Jinuk Kwon, and Chang-Hwan Im^{*}, "A Ternary Hybrid EEG-NIRS Brain-Computer Interface for the Classification of Brain Activation Patterns during Mental Arithmetic, Motor Imagery, and Idle State," Frontiers in Neuroinformatics, 2018. Top 20%
- Sungkean Kim, Ji Sun Kim, Min Jin Jin, Chang-Hwan Im*, and Seung-Hwan Lee*, "Dysfunctional frontal lobe activity during inhibitory tasks in individuals with childhood trauma: An event-related potential study," NeuroImage: Clinical, 2018. Top 10%
- Hodam Kim, Jihyeon Ha, Won-Du Chang, Wanjoo Park, Laehyun Kim, and Chang-Hwan Im*, "Detection of Craving for Gaming in Adolescents with Internet Gaming Disorder Using Multimodal Biosignals," Sensors, 2018. Top 20%





Laboratory History





http://cone.hanyang.ac.kr