



이름: 이기현 / LEE, Gihyoun

직위: 조교수 / Assistant Professor

소속: 전남대학교 헬스케어메디컬공학부 / School of
Healthcare and Biomedical Engineering, Chonnam
National University

기타소속: 전남대학교 바이오메디컬협동과정 / Department of
Biomedical Engineering, Chonnam National
University

국문 강연제목: 혈류역학적 뇌신호 기반의 개인맞춤형 뇌신경재활을 위한 디지털
헬스케어 기술

영문 강연제목: Personalized Neuro-rehabilitation Digital Healthcare based on
Hemodynamic Brain signal

Abstract

In the neuro-rehabilitation treatment methods, non-invasive neuromodulation techniques to enhance neuroplasticity are developing, however, there were individual differences in treatment effects and technical limitations. The goal of this study is for personalized and optimized neuro-feedback-based digital healthcare therapeutics using hemodynamic brain signals and non-invasive neuromodulation technology. In order to achieve this goal, functional near-infrared spectroscopy (fNIRS) signals are measured in stroke patients to analyze brain activity and optimization of hemodynamic response with neuro-feedback during high-resolution multi-channel transcranial direct current stimulation (HD-tDCS). We confirmed the application of HD-tDCS technology based on neuro-feedback using hemodynamic response to stroke patients and the clinical effect.

Brief Biosketch

경북대학교 학사, 석사, 박사학위 취득

대구경북과학기술원 리서치펠로우 (2016~2018)

삼성서울병원 연구교수 (2019~2023)

전남대학교 조교수 (2023~현재)

연구분야: 생체신호처리, 계산뇌공학, 뇌재활공학

BS, MS, Ph.D. at Kyungpook National University

Research Fellow at DGIST (2016~2018)

Research Professor at Samsung Medical Center (2019~2023)

Assistant Professor at Chonnam National University (2023~present)

Research interest : Biomedical signal processing, Computational brain engineering, Brain rehabilitation engineering.