

인공지능학과

Distinguished Lecture Series



일시: 2023년 11월 23일(목) 오후 1시 ~ 2시

장소: 과학도서관 611호

연사: Dongsheng Li 박사 (Microsoft Research Asia)

제목: Machine Learning for Understanding Brain Signals

초록: Electroencephalogram (EEG) is a crucial physiological signal used for monitoring brain state in clinical and research settings. However, in many EEG-based machine learning tasks, obtaining labeled data can be challenging due to the extensive effort required for labeling. This limitation greatly hinders the performance of machine learning algorithms in understanding EEG signals. To address this issue, we propose leveraging the large amount of unlabeled EEG data for pretraining, creating a foundation model for EEG signal processing. Our experiments on multiple EEG-based machine learning tasks demonstrate that our EEG foundation model significantly improves performance when fine-tuned on downstream tasks. Furthermore, our work has the potential to enhance our understanding of brain activities, such as visual perception reconstruction from EEG signals.

주최: 고려대학교 인공지능학과, 인공지능연구원, 인공지능혁신허브센터