Oct. 25, 2024

基盤医学特論

Tokuron Special Lecture

メディカルAI人材養成産学協働拠点(AI-MAILs)／卓越大学院プログラムCIBoG
特徴あるプログラム「メディカルAI」

Brain, Brain Networks, and Machine Learning

Lecturer: Dr. Epifanio Bagarinao is currently an associate professor of the Department of Integrated Health Sciences, Nagoya University Graduate School of Medicine.

Over View: The brain is a very complex system consisting of billions of neurons and trillions of connections. Because of this immense complexity, our understanding of the brain is still very limited. Consequently, causes of neurological and psychiatric disorders such as Alzheimer's disease, Parkinson's disease, epilepsy, autism spectrum disorder, depression, schizophrenia, and others, affecting individuals, their families, and society in general, remain largely unknown. Recent advances in brain imaging technology have enabled researchers to noninvasively identify changes occurring in the brains of patients with various neurological and psychiatric disorders. As such, several studies have investigated the feasibility of utilizing these changes as potential neuroimaging-based biomarkers of these disorders using machine learning algorithms, such as support vector machines. This lecture will introduce well-established techniques using magnetic resonance imaging to identify changes in brain structure and its functional organization in various brain disorders and present applications of machine learning algorithms in classifying patients from healthy controls based on these changes.

Date: Oct. 25, 2024 (Fri.) 17:00 – 18:30 (Online)
Language : English
Contact: Ms. Sayuri Asai, Secretariat of AI-MAILs (ext. 2022)

＊ Teams にて開催します。前週金曜日に学務課よりメールで送られる「TKR&TPRO 特論/特プロ開講通知」を確認して下さい。
This lecture is held through Teams. The URL for class registration of this lecture will be announced by the e-mail"【med-all】TKR&TPRO Lectures Scheduled Coming Week" sent on Friday of the previous week. Please check emails regularly, when the lecture date of your choice approaches.

＊ 出席は TACT を用いて行います。TACT へ入力するキーワードは講義中にお知らせします。
Attendance is checked through TACT. The keyword for TACT will be given during the class.

＊ 配布資料、講義についてのお知らせが直前にされる場合があります。その場合は med-all ではなく、AI-MAILs ホームページでお知らせしますので時折ご確認ください。
There may be last-minute announcements regarding handouts and lectures. In such cases, the information will be provided on the AI-MAILs website rather than on med-all, so please check it occasionally.