

MULTI-CENTER INTELLIGENT DIAGNOSIS OF Alzheimer's Disease

Alzheimer's disease (AD) is a neurodegenerative disease, which widely occurs in the elderly. Its early diagnosis based on artificial intelligence technology is of great clinical significance, but the established intelligent diagnosis model often performs bad in generalization. In this regard, we have carried out extensive research on the multi-center problem in AD intelligent diagnosis, including: multi-center data difference analysis, deep feature learning algorithm, federal learning to protect data privacy, multi-omics and multi-modal data fusion, large model development and so on. The experimental results show that our multi-center study can effectively suppress data differences, realize deep feature learning, and improve the accuracy of early diagnosis.



Speaker: Prof. LEI Baiying

Baiying Lei is a national-level young talent candidate, a distinguished professor at Shenzhen University, a visiting professor at Xi'an University of Electronic Science and Technology, a doctoral supervisor. She obtained her PhD from Nanyang Technological University in Singapore. The main research interests are medical image processing and artificial intelligence. She has published more than 100 SCI papers as the first/corresponding author (including co-authors) in IEEE TMI and Medical Image Analysis (6 ESI highly cited papers and 1 hot paper). The total number of citations in Google Scholar exceeds 9,500, and the H-index is 48. She hosted more than 20 projects (including 7 national-level projects) including 1 key project of the National Natural Science Foundation of China and 2 general projects. She is currently an editorial board member of 10 SCI journals including IEEE TNNLS, TCYB, TMI, JBHI, and Medical Image Analysis. She is the technical committees such as IEEE BISP, BIIP, and BSP, and area chair of MICCAI (2021-2023). She is selected as the "Top 2% of Global Scientists" (2020-2023), and nominated for "Young Scientists of a Strong Country" (2022, National 40 people in total), CSIG Shi Qingyun Female Scientist Award (2022).

- 📅 **19 April 2024 (Friday)**
- 🕒 **10:00am-11:00am**
- 📍 **SEK210, 2/F, Simon & Eleanor Kwok Building**
- 🌐 **English**