

Enhance Prediction of Alzheimer's Disease with Generative AI

Thursday, February 20, 2025, 12:00pm – 1:30pm over Zoom

This lecture will introduce a novel generative AI model to impute missing neuroimaging data in longitudinal studies of Alzheimer's Disease (AD). The model focuses on generating missing images at a designated single visit by conditioning one or more observed images from other time points. In addition to missingness, populations under-represented in the data, such as individuals from racial and ethnic minorities, pose challenges for longitudinal studies of AD, such as reducing the sample size, increasing selection bias, and reducing statistical power. Consequently, this lecture will introduce a prognostic study that investigated the algorithmic fairness of machine learning models for predicting the progression of AD and discuss the opportunity of building generative AI models to augment data for under-represented groups to enhance fairness.

Presenter:



Chenxi (Chelsea) Yuan, Ph.D. Assistant Professor Department of Informatics Ying Wu College of Computing New Jersey Institute of Technology

Target Audience:

Researchers focusing on longitudinal studies and missing data challenges in medical research, such as Alzheimer's Disease. Machine learning experts interested in healthcare applications, particularly neuroimaging and AD.



<u>Register Here to</u> <u>receive Zoom Link</u>

Please register using the <u>link</u> or scanning the QR code Reach out to <u>natale.mazzaferro@rutgers.edu</u> with any questions!