

**Recent Advances in Artificial Intelligence for Brain  
Research  
Special Session, Brain Informatics 2023**



**Call for Abstract Submission**

Broad goals of human brain research are to improve the understanding of the causes and working of different types of neurological disorders and then improve the detection, diagnosis, and prognosis of these disorders. At present, artificial intelligence (AI) has emerged as a potential direction to significantly enhance neurological research. Recent advances in AI, including machine learning (ML) and deep learning (DL) technologies, have enabled the analysis of neurological data beyond classical data-processing techniques.

We cordially invite researchers from across the globe to present **recent research findings** (*not necessarily unpublished*) in both methodology for early detection, severity prediction as well as understanding the mechanisms of various brain disorders. Potential interests include but are not limited to the following areas:

- (i) Analysis of brain bioinformatics and neuro-imaging data - diffusion tensor imaging (DTI), functional MRI (fMRI), electroencephalogram (EEG), magnetoencephalography (MEG) etc.
- (ii) AI-based methods to detect, classify, and predict brain cancer.
- (iii) Interpretable and explainable AI-based systems for neurological applications.
- (iv) AI-based applications for different types of mental disabilities - Alzheimer's disease, major depressive disorder, bipolar disorder, schizophrenia etc.
- (v) DL/ML methods for understanding pathology and progression neurological disorders.

**Abstract (one page) submission link:** <https://shorturl.at/iwx19>

Submission deadline: **July 15, 2023.**

Abstract acceptance notification: **July 18, 2023.**

**Organizer:**

Dr. Sanjay Ghosh

University of California San Francisco, USA.

Email: [sanjay.ghosh@ucsf.edu](mailto:sanjay.ghosh@ucsf.edu)

Webpage: <https://profiles.ucsf.edu/sanjay.ghosh>