AIN DAP

Artificial Intelligence in Neurodegenerative Diseases: Advances and Prospects

Session co-chairs

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The application of Artificial Intelligence (AI) in the analysis of neurodegenerative diseases is a crucial advancement both in terms of understanding the underlying mechanisms and developing innovative approaches for diagnosis and treatment. AI gained a great role in neurodegenerative disease analysis and is becoming increasingly significant, offering innovative solutions to longstanding challenges in the diagnosis, prognosis, and treatment of diseases such as Alzheimer's, Parkinson's, Huntington's, and others.

This session seeks to showcase cutting-edge research and developments in the application of AI technologies to the field of neurodegenerative diseases, with a specific focus on advanced signal analysis and sophisticated medical image processing tools. We are calling for innovative papers that elucidate the complex interplay between AI,(machine learning, deep learning, experts systems, multi agents systems….) and detection and prediction of neurodegenerative such as Alzheimer's and Parkinson's, Amyotrophic Lateral Sclerosis's , and Huntington's diseases.

We encourage submissions that offer a deep dive into the following key areas:

1. Advanced AI in Neurological Signal Analysis:

2. Machine Learning for Enhanced Medical Image Processing:

3. Deep Learning Architectures in Neurodegenerative Disease Modeling

4. Biomarker Discovery through AI Algorithms

5. Integration of AI in Clinical Neurodegenerative Management:

6. AI-Driven Approaches in Drug Discovery for Neurodegenerative Conditions:

Interdisciplinary papers that demonstrate a strong technical foundation and bridge the gap between AI and neurodegenerative disease research are particularly welcome.