

Special session proposal

- i. **Title of the special session:** Artificial Intelligence and Machine Learning to detect Human Neurological Disorders
- ii. **Description of the special session:** The researches to develop artificial intelligence (AI) based systems to detect human diseases has been significantly increasing in the recent past. These systems use machine learning algorithms or AI to analyse the complex data related to various human diseases in order to diagnose or predict the name of the disease. These AI based systems analyze the connection between clinical techniques and patient outcomes. The AI based systems are used for diagnosis, drug development, and patient monitoring & care. These disease detection systems help the medical practitioner to diagnose the disease more accurately. The AI based methods recognize different patterns in the data corresponding to different human diseases. The recognition of different patterns may be carried out using various machine learning or deep learning algorithms.

Various significant AI based systems exist to detect or diagnose different human diseases. But, the existence of AI based systems to diagnose or detect various complex human neurological disorders is lesser in comparison to other diseases. So, the number of researches needs to be increased to develop more significant AI based systems to diagnose or detect various complex human neurological disorders.

The special session is focused on the research developments of AI based systems to detect various types of human neurological disorders. Topics of interest include, but are not limited to, the following neurological disorders:

- i. Parkinson disease
- ii. Schizophrenia disease
- iii. Alzheimer's disease
- iv. Bell's Palsy
- v. Cerebral Palsy
- vi. Epilepsy
- vii. Brain Tumors
- viii. Autism
- ix. Cerebral Aneurysm
- x. Amyotrophic lateral sclerosis
- xi. Acute spinal cord injury
- xiii. Neuromuscular disorders