

PRELIMINARY PROGRAM			
Day 1 - 1/07/19			
Time	Topic	Title	Lecturer
9:00-9:15	Opening	Introduction to the Summer School	Dr. Anubha Gupta
9:15-10:00	EEG signal processing	Part-1: Signal Modeling, Detection, and Classification	Dr. Anubha Gupta
10:00-11:00	Brain network analysis	Part-2: Brain Network Analysis	Dr. Anubha Gupta
11:00-11:30	Coffee break		
11:30-12:30	Epilepsy diagnosis	Epilepsy diagnosis	Siddharth Panwar
12:30-14:00	Lunch break		
14:00-17:00	Hands-on session - EEG acquisition from EMOTIV and RMS machines		
Day 2 - 2/07/19			
Time	Topic	Title	Lecturer
9:00-10:00	Assistive robotics	Brain-Machine Interfaces for Assistive Robotics	Dr. Jainendra Shukla
10:00-11:00	Clinical decision making	Leveraging physiological signals for clinical decision making	Dr. Tav Pritesh Sethi
11:00-11:30	Coffee break		
11:30-12:30	Multisensory Perception	Multi-scale representational space of multisensory perception	Dr. Arpan Banerjee
12:30-14:00	Lunch break		
14:00-17:00	Hands-on session - EEGLAB: An introduction		
Day 3 - 3/07/19			
Time	Topic	Title	Lecturer
9:00-10:00	Public health	Big data applications of physiological signal data- Opportunities and Challenges	Dr. Drishti Sharma
10:00-11:00	EEG dipole source localization	Hemispherical harmonics domain based EEG dipole source localization	Dr. Lalan Kumar
11:00-11:30	Coffee break		
11:30-12:30	Diffuse Optical Tomography	Brain mapping using diffuse optical topography in cognitive neurosciences	Dr. Rohit Verma
12:30-14:00	Lunch break		

14:00-17:00	Hands-on session - EEGLAB: Pre-processing and filtering of EEG data		
Day 4 - 4/07/19			
Time	Topic	Title	Lecturer
9:00-10:00	Functional brain networks and fMRI	Part-1: Introduction to fMRI data Analysis	Dr. Anubha Gupta
10:00-11:00	Functional brain networks and fMRI	Part-2: Building functional Brain Networks using fMRI data Analysis	Dr. Anubha Gupta
11:00-11:30	Coffee break		
11:30-12:30	Functional brain networks and fMRI	Part-3: Machine Learning in fMRI data Analysis	Dr. Anubha Gupta
12:30-14:00	Lunch break		
14:00-17:00	Hands-on session - fMRI data handling and pre-processing		
Day 5 - 5/07/19			
Time	Topic	Title	Lecturer
9:00-10:00	Bio-potential and Health monitoring	Part-1: Wearables for health monitoring- designing from first principles	Dr. Sujay Deb
10:00-11:00	Bio-potential and Health monitoring	Part-2: Wearables for health monitoring- designing from first principles	Dr. Sujay Deb
11:00-11:30	Coffee break		
11:30-12:30	Emotion recognition using EEG	Emotion recognition from EEG signals	Dr. Jainendra Shukla
12:30-14:00	Lunch break		
14:00-17:00	Hands-on session - Brain Network analysis using BCT		