



ST. XAVIER'S COLLEGE, MAPUSA GOA

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Awarded DBT STAR College Scheme

Nature of Event (Workshop, Guest Lecture, Add on Course, Seminar, etc.)	Five days Online online Faculty Development Programme on “Signal Processing for Cognitive Neuroscience Applications”
Name of Department	Electronics
Faculty Attended	Dr. Noel Gervasio Tavares
Stratum of Event (College, State, Regional, National)	National level
Title of Event	“Signal Processing for Cognitive Neuroscience Applications”
Date of Event	17 th January 2022 to 21 st January 2022 from 10:00 a.m. to 4:00 p.m.
Venue	Online mode organized by Department of Electronics and Communication Engineering, National Institute of Technology, Meghalaya
Resource Person details	Dr. Sanjeev Kubakaddi, ITIE Knowledge Solutions Mr. Aneesh Mitra, ITIE Knowledge Solutions Mr. Alex, MITSAR, Russia Dr. Mahesh Jayachandra, St. John’s Hospital, Bangalore Dr. Ksh. Milan Singh, NIT Meghalaya Dr. Satyendra Singh Yadav, NIT Meghalaya Dr. Balajied Nongrun, Regional Director (Asia Pacific)
Objective/ Scope of Event	The importance of developing cognitive computation and cognitive neuroscience systems has lots of interest. The research in this field is now rapidly expanding with the current influx of advanced signal processing innovations. Nowadays, solutions based on advanced signal processing are dramatically transforming the lives of human and are having a profound impact on a wide range of disciplines and industries..

Particulars of Event	<p>The different sessions conducted were:</p> <ol style="list-style-type: none"> 1) Signal processing for cognitive science 2) Filtering Concepts 3) Time/Frequency Analysis 4) EEG Signals 5) Introduction to Cognitive Neuroscience 6) Machine Learning techniques 7) Brain Computer Interface 8) Signal Processing for Biomedical Application 9) Speech Emotion Recognition 10) Visualization of Signal Processing concepts 11) Lab on EEG Data Acquisition 12) Live Demo BCI 13) Human Values and Ethics 14) Lab on Speech Emotion Recognition
Outcome of Event	<p>This workshop brought together cognitive neuroscience and signal processing researchers not only to understand the human brain, but also to improve signal processing approaches to identify:</p> <ol style="list-style-type: none"> 1) How the information processing happens on the level of neurons in the human brain? 2) How does sensory data become perception? 3) Data acquisition techniques 4) Approaches in brain computer interface <p>The course contained theoretical lectures supported with practical sessions on signal processing applications in cognitive neuroscience. Invited talks were delivered by academicians and industry persons who were working in this area.</p>
Feedback	<p>Good. Course was helpful.</p>
Total No. of Participants from St. Xaviers College, Goa	<p>One faculty member from the Department of Electronics, St. Xaviers College, Goa</p>

Photographs

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ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070

AICTE Training and Learning (ATAL) Academy

Certificate

This is certified that Noel Tavares, Assistant Professor of St Xavier's College participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Signal Processing for Cognitive Neuroscience Applications" from 17/01/2022 to 21/01/2022 at National Institute of Technology Meghalaya.


Advisor-I, ATAL Academy
Mamta Rani Agarwal




Coordinator