A One Day Workshop on

"Application of Artificial Intelligence/ Deep Learning for Medical Big Data Analysis"

August 9, 2019

Funded by: TEQIP-III

Workshop Overview

Healthcare organizations of all sizes, types, and specialties are becoming increasingly interested in how artificial intelligence can support better patient care while reducing costs and improving efficiencies. **Artifical Intelligence in healthcare** is the use of complex algorithms and software to estimate human cognition in the analysis of complicated medical data. Specifically, AI is the ability for computer algorithms to approximate conclusions without direct human input. The primary aim of health-related AI applications is to analyze relationships between prevention or treatment techniques and patient outcomes. AI programs have been developed and applied to practices such as diagnosis processes, treatment protocol development, drug development, personalized medicine, patient monitoring and care. The use of AI is predicted to decrease medical costs as there will be more accuracy in diagnosis and better predictions in the treatment plan as well as more prevention of disease. In order to efficiently and effectively choose between vendor products or hire the right data science staff to develop algorithms in-house, healthcare organizations should feel confident that they have a firm grasp on the different flavors of artificial intelligence and how they can apply to specific use cases. Deep learning is a good place to start. **Deep learning**, also known as hierarchical learning or deep structured learning, is a type of machine learning that uses a layered algorithmic architecture to analyze data. In deep learning models, data is filtered through a cascade of multiple layers, with each successive layer using the output from the previous one to inform its results. Deep learning models can become more and more accurate as they process more data, essentially learning from previous results to refine their ability to make correlations and connections. Deep learning helps researchers analyze medical data to treat diseases. It enhances doctors' ability to analyze medical images. It even helps the blind "see". Three trends drive the deep learning revolution: more powerful GPUs, sophisticated neural network algorithms modelled on the human brain and access to the explosion of data from the internet.

You Should Attend If…	• You are a student of B.Tech, M.Tech., Ph.D. and faculty from reputed academic institutions and technical institutions. • You are an executive, engineer and researcher from power grid, service and government organizations including R&D laboratories.
Fees	• There is no participation fees for the workshop.

Expert

Prof. Prasan Kumar Sahoo received the BSc (with Honors) degree in physics, the MSc degree in mathematics from Utkal University, India, in 1987 and 1994, respectively. He received the MTech degree in computer science from the Indian Institute of Technology (IIT), Kharagpur, India, in 2000, the first Ph.D. degree in mathematics from Utkal University, in 2002, and the second Ph.D. degree in computer science and information engineering from the National Central University, Taiwan, in 2009. He is currently a Professor in the Department of Computer Science and Information Engineering, Chang Gung University, Taiwan. He is also an Adjunct Researcher in the Division of Colon and Rectal Surgery, Chang Gung Memorial Hospital, Taiwan since 2018. His current research interests include artificial intelligence, big data analytic, cloud computing, and IoT. Dr. Sahoo is an Editorial Board Member for the International Journal of Vehicle Information and Communication Systems (IJVIC) and has worked as the Program Committee Member of several IEEE and ACM conferences. He is a senior member, IEEE.

Number of participants for the course will be limited to fifty.

The course inauguration and desk registration will take place on Aug 09, 2019 at 9 - 9.30 am. Registration can be done online at :
https://docs.google.com/forms/d/e/1FAIpQLSdIYMCAcXzpkOsO_prq4mu7zGkA_3-syGqPEqakwEYInfCAiw/viewform?vc=0&c=0&w=1

National Institute of Technology,
Meghalaya, Shillong,
Laitumkhrah–793003, India

Organizing Committee

Patron

Prof. Bibhuti Bhushan Biswal
Director NIT Meghalaya
Phone: +91-0364-250129
E-mail: director@nitm.ac.in

Chairman

Dr. Yogita
Assistant Professor & HOD
Dept. of Computer Science & Engg.
Phone: +91-9485185905
Email: yogitathakran@nitm.ac.in

Organizing Secretary

Dr. Diptendu Sinha Roy
Associate Professor
Dept. of Computer Science & Engg.
Phone: +91-9436124204
E-mail: diptendu.sr@nitm.ac.in

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