

### Course Contents

- Introduction to Artificial Intelligence and Problem Formulation
- Introduction about Machine Learning and its applications
- Supervised and Unsupervised Learning methods
- Statistical Learning
- Dimensionality Reduction methods,
- Hands on to implementation of Supervised and Unsupervised methods
- Reinforcement Learning, Optimization and Data driven Methods
- Introduction to Deep learning methods and applications
- Medical Image data processing and analysis
- Hands on to implementation of Image data processing and analysis

### Scope and the Training Programme

Artificial intelligence (AI) is the simulation of human intelligence processes by machines, especially computer systems. These processes include learning, reasoning and self-correction. Particular applications of AI include expert systems, speech recognition and machine vision. Machine Learning (ML) is a subset of Artificial Intelligence. ML is the science of designing and applying algorithms that are able to learn things from past cases. The ultimate goal of AI and ML is in its ability to produce systems that are used regularly in industry, education, and elsewhere. This workshop paves a path to understand the difference between AI & ML and apply the principles of both in a real-time scenario. Hands-On Training in the implementation of various Machine Learning and Deep Learning Techniques using software tools.

### Eligibility

The participants of the Course will be Faculty, Research and PG Scholars of AICTE approved Institutions.

### Registration

Only online Registration for the Course through the below link:

<https://forms.gle/obMWbXRiSCWGjY6x7>

### Certification

The Certificates shall be issued by AICTE Training and Learning (ATAL) academy to those participants who have attended the program without any absenteeism and scored minimum 60% marks in the test conducted at the end of the workshop.

### Important Dates

Last date (Online Registration): 17-10-2019

Selection list by E-mail: 18-10-2019

Duration: 21-10-2019 to 25-10-2019

### Coordinator

**Dr. J. Arul Valan**

Assistant Professor

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## AICTE Training and Learning (ATAL) Academy



**Five Days Workshop**

on

**ARTIFICIAL INTELLIGENCE & MACHINE  
LEARNING**

**21<sup>st</sup> - 25<sup>th</sup> October 2019**

**Patron**

**Dr. S. Venugopal**

Director, NIT Nagaland

**Convener**

**Dr. Themrichon Tuithung**

HOD and Professor

Computer Science and Engineering

**Coordinator**

**Dr. J. Arul Valan**

Assistant Professor

Computer Science and Engineering



**Organized by**

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND

Chumukeidma, Dimapur, Nagaland-797103

**Website: [www.nitnagaland.ac.in](http://www.nitnagaland.ac.in)**

### About the Institute

National Institute of Technology Nagaland (NIT Nagaland) is a higher education technology institute located at Dimapur in Nagaland and was set up by the Government of India in 2009, as part of the Eleventh Five-Year Plan (2007–2012) for imparting technical education in the state of Nagaland. NIT Nagaland is located at Chumukedima, about 14 kilometers from Dimapur, Nagaland. The campus is well connected through proper means of transport and communication. At present there are six undergraduate courses namely Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering, Civil Engineering, Mechanical Engineering & Electronics and Instrumentation Engineering and five postgraduate courses namely M.Tech in Power System Engineering, VLSI Systems, Computer Science and Engineering, Electronics and Communication Engineering & M.Sc. in Physics, inclusive of PhD studies.

### ATAL Academy

AICTE Training and Learning (ATAL) Academy is established with the vision “To empower faculty to achieve goals of Higher Education such as access, equity and quality”. AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development. Council understand that there is a need of the day to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies.

### About the Department

The Department of Computer Science and Engineering is Research-oriented but at the same time Student-centered Department. The primary motto of the department is to provide high quality education. The department strives to inculcate conceptual and technical skills in students through a modern scientific teaching methodology. The laboratory exercises are designed to implement the latest software and tools of the industry. The Department will continue to develop and administer programs which serve the needs of industrial computer scientists, researchers, and computer application specialists for whom the discipline of computing sciences provides indispensable tools. The department offers Under Graduate, Post Graduate and PhD programmes.

### Resource Person

Resource Persons from NITs and Industry with rich experience in Teaching and R&D will be handling the sessions.

### Organizing Committee

Dr. ShouvikDey, AP, CSE, NIT Nagaland  
Dr. Arambam Neelima, AP, CSE, NIT Nagaland  
Dr. Nagaraju Baydeti, AP, CSE, NIT Nagaland  
Dr. Dilwar Hussian.Mazumder, AP, CSE,  
NIT Nagaland  
Mr. Lithungo Murry, AP, CSE, NIT Nagaland  
Mr. Sibesh Lodh, AP, CSE, NIT Nagaland

### Instruction

- There is **No Registration Fee**.
- No TA/DA will be paid to any participant.
- Participants will have to make their own stay arrangement during the five days.
- Only tea and lunch will be provided to the participants during sessions.
- For Faculty, the application form (hard copy) must be forwarded through the Head of the Institution / Department to the Coordinator.
- Participant will be selected on first come first basis.
- Total number of participants for the course is 50.

### Note:

For Faculty participant, NOC from respective department is required at the time of Registration.

### Contact us

For any clarifications, please contact

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To download the Brochure and for latest updates, please visit our Institute website [www.nitnagaland.ac.in](http://www.nitnagaland.ac.in)