Ministry of Electronics and Information Technology (MeitY)
Govt. of India supports its
Electronics and ICT Academies to organize Faculty Development Programme **on**
AI and Machine Learning during 04th -08th June, 2018 at
IIT Guwahati, IIT Roorkee, IIITDM Jabalpur, MNIT Jaipur, NIT Patna and NIT Warangal

About Summer Courses

Faculty Development Programmes in core areas of Electronics and Information & Communication Technology (ICT) streams have been planned by academies for delivery during Summer (i.e., May - June 2018). All these summer courses will be offered through National Knowledge Network (NKN) by inviting experts from IITs, NITs, IIITs and other premier institutes/industries. In addition, local course coordinators at respective academies /identified remote centers will take care of sessions on design oriented/activity linked problems/ assignments/ case studies and quiz test(s).

These courses will be delivered at E & ICT Academies/identified centers through NKN infrastructure. Candidates could apply for training at academy locations or identified centers as per the convenience.

Course 4: AI and Machine Learning

Principal Coordinator Academy	Support Coordinator - Academy	Participating Academies and Local Coordinator Details
Prof. Dr. Sanjeev Manhas samanfec@iitr.ac.in **IIT Roorkee**	*Dr. Satyasai J. Nanda* sjnanda.ece@mnit.ac.in **MNIT Jaipur**	**IIT Roorkee -** *Dr. R Balasubramanian* balarfma@iitr.ac.in
		MNIT Jaipur - *Dr. Santosh Vipparthi* skvipparthi.cse@mnit.ac.in
		IIITDM Jabalpur - *Dr. Atul Gupta* atul@iiitdmj.ac.in
		NIT Warangal - *Prof. DVLN Somyajulu* eict.nitw@gmail.com
		NIT Patna - *Dr. Akshay Deepak&Dr. Ditipriya Sinha* akshayd@nitp.ac.in & ditipriya.cse@nitp.ac.in

Module details of AI and Machine Learning

S.No.	Module Name	Topics
1.	AI Fundamentals	Fundamental Concepts of AI: Agents, environments, general model; Problem Solving techniques.
2.	Search Techniques	Uninformed search, heuristic search, adversarial search and game trees; Solution of constraint satisfaction problems using Search.
3.	Knowledge Representation	Propositional and predicate calculus, semantics for predicate calculus, inference rules.
4.	Machine Learning Structures	Supervised and unsupervised learning. Artificial Neural Network (Multi Layer Perception), Radial Basis Function, Functional Link ANN, Self Organizing Map, Clustering Adaptive FIR and IIR structures.
5.	Machine Learning Algorithms	Least Mean Square algorithm, Back Propagation, Genetic algorithm, Differential Evolution, Particle Swarm Optimization and Other Nature Inspired Optimization.

Registration Fee: No Registration fee is charged for attending this programme planned at any designated academies/Remote centers. However, candidate should submit a refundable Demand Draft of Rs.1000/- along with application and the same will be handed over to participant on the last day of the training. Satisfactory Certificate will be given subject to fulfillment of attending all sessions, submission of assignments and clearing the test(s).

Last Date of Registration: 28th May'2018.

Lodging and Boarding will be provided free of cost at the Academy.

Participants can also attend the course at the following Remote Nodal Center

1.Maulana Azad National Institute of Technology (MANIT), Bhopal, Madhya Pradesh.

Remote Center Coordinator: Dr. Lalita Gupta

Email: gupta.lalita@gmail.com

2. DSPM- International Institute of Information Technology (DSPM-IIIT), Naya Raipur, Chhattisgarh

Remote Center Coordinator: Dr. Vivek Tiwari & Dr. Venkanna U

Email: vivek@iiitnr.edu.in, venkannau@iiitnr.edu.in

3. Shri Ramdeobaba College of Engineering and Management (RCOEM), Nagpur, Maharashtra.