



FACULTY DEVELOPMENT PROGRAMME

on

Machine Learning and Soft Computing Approaches for Real-time Applications

(September 24th - 30th 2022)

Organized by



E & ICT Academy, NIT Warangal

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

in association with

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(Autonomous)

Department of Computer Science and Engineering & Information Technology

Preamble:

Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. The role of this academy role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

This Faculty Development Programme (FDP) is devoted to address the need to enhance the knowledge about the latest technologies pertaining to **Machine Learning and Soft Computing Approaches for Real-time Applications** is being conducted at **AITAM, Tekkali**. The course is handled by academicians and industry experts.

Major Course Contents:

- Introduction to Artificial neural network, six-Types of Artificial Neural Networks Currently Being Used in Machine Learning, Feed forward neural network, Radial basis function neural network Kohonen self organizing neural network, Convolutional neural network, Modular neural network
- Applications: Handwriting recognition/signature identification, Image compression, Traveling salesman problem, prediction Stock exchange, cryptographic, Applications using ANN, Jordan network, Graph neural networks, Higher order graph; Hands on: a deep learning approach to antibiotic discovery
- Image processing, computer vision and visualization, Machine learning and pattern recognition, Neural information processing systems and brain theory, Non-linear kernel machines, support vector machines, Reinforcement learning and evolutionary computation
- Introduction: A Social History of Machine Learning.
- Table to Symbol: Structured Data, Unsupervised, Classification, and Organizations. Sequence to Symbol: Text, Entextualization, and Contextualization., Image to Symbol: Convolutional Neural Networks (CNNs), Supervised Classification, and Iconicity.
- Generative Adversarial Networks, Creative AI, and the Habitus, Sequence to Sequence: Recurrent Neural Networks (RNNs), Machine Translation, Structuralism and Poetics, Signals: Speech, Sound, and Temporality.

Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal, and AITAM, Tekkali. Academicians in the concerned field from IITs/NITs/IITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the programme.

Eligibility:

The programme is open to the Faculty of Engineering Colleges, MCA Colleges, other allied disciplines, and Industry personnel working in the concerned /allied discipline can also attend.

Selection Criteria:

Selection will be done based on **first-come-first-serve** basis to a maximum number of 100. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a

premier Institute, imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph. D. programs in various specializations. All B.Tech and M.Tech programmes of NIT Warangal are NBA accredited.

About Aditya Institute of Technology and Management Foundation:

The Aditya Institute of Technology and Management (Autonomous) was established in 2001 under Aditya Educational Society to offer quality education in north coastal A.P. It offers B.Tech programs in ECE, CSE, IT, EEE, CE, MECH, CSM and CSD which are accredited by NBA & NAAC. It also offers postgraduate programs in MBA, and 4 disciplines of M.Tech. in Engineering. Departments of CSE, ECE, CE, ME and EEE are recognized as research centers by JNTUK Kakinada. AITAM is permanently affiliated to JNTUK Kakinada, Approved by AICTE, Recognized u/s(2)(f)&12(B), Recognized as SIRO by DSR-DIST, FIST Institution.

The success of the college is due to its well qualified faculty (out of 257 total faculty members 41 have Ph.Ds, 216 have PG qualifications with 29 having registered for Ph.D and 4 submitted their thesis) and several of them with rich experience in higher institutes of learning nationwide. The senior faculty members always guide the junior faculty in honing their teaching and research skills. The progress of each course in every semester is closely monitored by a class committee which includes representatives from students. Electronic Digital Examination Process System for the end semester examination and online internal examination system are salient features of the evaluation system followed.

About the Department:

Aditya Institute of Technology and Management (AITAM) established the department of Computer Science & Engineering (CSE) in 2001 with an initial intake of 60 students, enhanced by 30 seats in 2006-07, further enhanced by 30 seats in 2007-08, and got approval for an additional intake of another 60 seats in 2012-13 and the total intake of B. Tech program reaches 180 seats. A Post Graduate program (M. Tech) in CSE was introduced in 2008-09 with an intake of 18 seats. An additional intake of 18 seats was incorporated in 2009-10 and the total intake of M. Tech program reaches 36 seats and reduced to 18 seats in the year 2017-18. In 2009-10 the department of CSE was accredited by National Board of Accreditation (NBA) for three years (Cycle-1). It is an added feather to our crown. In 2012-13 the department was reaccredited by National Board of Accreditation (NBA) for another two years (cycle-2) and reaccredited by NBA for three years (cycle-3) in year 2017-18. The department of CSE feels proud to announce that this Institution has got accredited by NAAC in September, 2011 (cycle-1) and reaccredited in 2019 (cycle-2) with A+ Grade. The college has got TEQIP funds in phase-II under sub-component 1.1. These two important additions surely enhance the prestige of the Institution; in turn help students to improve their academic standards. Both the B. Tech and M. Tech programs were duly approved by the AICTE and Govt. of A.P. and the Institution is affiliated to JNTUK. The Dept. of CSE is recognized as a research center twice by JNTUK to offer PhD Programs. The Dept. of CSE established DST-FIST Sponsored Lab IN 2019 to promote the research and innovation. The department of CSE is leaping forward with strength by strength over the years.

Registration Fee and Payment details:

Faculty and Research Scholars	Rs. 750 /-
Industry Participants	Rs. 2250 /-
Online payment Details:	
Account Name: Electronics & ICT Academy	
NITW Account No: 62423775910	
IFSC: SBIN0020149	

How to apply:

Participants are required to fill the online registration form through the following link: <https://forms.gle/Fa8bBZ2Ay7ZsnMxY9>

Calendar dates to Note:

Last date to submit Registration	23-09-2022
Selection of Applicant by E-mail	23-09-2022
FDP duration	24 – 09 – 2022 to 30 – 09 – 2022



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SPONSORSHIP CERTIFICATE:

1. Name :
2. Designation :
3. Institution :
4. Email :
5. Reference No :
Bank :
Date :
Amount :
6. Address for Correspondence :
7. Educational Qualification :
8. Subjects taught so far :
9. No. of refresher courses/workshops attended:
10. Experience (in years):
Teaching: Research: Industry:
11. Do you belong to SC/ST: YES / NO

Dr. /Mr. /Ms.
is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on “**Machine Learning and Soft Computing Approaches for Real-time Applications**”, sponsored by Electronics & ICT Academy during *September 24th to 30th 2022* at **Aditya Institute of Technology and Management(A)**, Tekkali, Srikakulam Dist, Andhra Pradesh.

Signature of Head of Institution
(With seal)

Address for correspondence

Post your application form (if it becomes offline)

CONVENER
Dr. U.D. Prasan
Professor and Head
Computer Science & Engineering,
Aditya Institute of Technology and Management ,
K. Kotturu, Tekkali – 532201, Srikakulam (Dist),
Andhra Pradesh, India.

For more details about Electronics & ICT Academy, NIT, Warangal, please visit: <https://nitw.ac.in/eict>

For more enquiries please contact:

Dr. M. Jayanthi Rao
Assistant Professor, Dept. of CSE, AITAM
Mobile: +91 9885936995, 8074265300

Declaration:

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Signature of the Applicant

Coordinators

Dr. M. Jayanthi Rao
Assistant Professor, Dept. of CSE
Aditya Institute of Technology and Management
K. Kotturu, Tekkali – 532201, Srikakulam (Dist),
Andhra Pradesh, India.

Dr. Cheruku Ramalingaswamy
Assistant Professor, Dept. of CSE
National Institute of Technology,
Warangal -506004, Telangana