



AICTE Sponsored

A Six Day

**Short Term Training Program
(STTP)**

on

*Advances in Computing
using Emerging
Technologies in Smart
Environment (PHASE-1)*

2 – 7 November 2020

(Through Online Mode)

Dr M Madhu Bala

Professor of CSE, Coordinator



Organized by

Computer Science and Engineering

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

www.iare.ac.in/

About IARE

Institute of Aeronautical Engineering (**IARE**), Hyderabad was established in the year 2000 and is run by Maruthi Educational Society founded by a devoted group of eminent professional and industrialists having a long and outstanding experience in educational system with a mission 'Education for Liberation'. IARE is a prestigious **Autonomous** engineering college offering seven B.Tech programs (CSE, IT, ECE, EEE, Aeronautical, Mechanical and Civil Engineering) and six M.Tech programs in engineering and MBA with 20 years of rich standing in the educational sphere. The institute is approved by AICTE, New Delhi; recognized by Govt. of Telangana; permanently affiliated to Jawaharlal Nehru Technological University Hyderabad (JNTUH); and accredited by National Assessment and Accreditation Council (NAAC) with 'A' Grade. All the seven B.Tech programs and 4 PG programs are accredited by National Board of Accreditation (NBA), New Delhi since 2008. The institute also received UGC recognition under Sections 2(f) and 12(B) of the UGC Act.

The institute is ranked **139** in engineering category as per **National Institutional Ranking Framework (NIRF)** – 2019, Ministry of Human Resource Development (MHRD). The Institution has to its credit, over 1500+ research publications in International Journals / Conferences. This includes over 630+ research papers listed in the Scopus database. 55+ Patents have been filed / granted to faculty and students. There are 14 on-going research projects of worth 606.40 Lakhs and 235.03 Lakhs of funds for schemes and 1300 + Lakhs of funds for Innovation, Incubation and Entrepreneurship by various government agencies including DST, AICTE, UGC etc. Recently IARE has received 26.0 lakhs for Margdarshan by AICTE.

About Department

Department of Computer Science and Engineering was started in the year 2001 with B. Tech (CSE). Currently it is offering CSE, CEE(AI&ML), CSE(CS), CSE(DS) and M. Tech (CSE) programs. The department has a research center recognized by JNTUH for admitting Ph. D students. The department currently has 50 faculty members, including ten doctorates.

The department provides the state-of-art laboratories equipped with latest infrastructure. The department has dedicated Center for Research on Assistive Technologies with exclusive research facilities of Big Data nodes, Cyberoam firewall for bandwidth and multilink management, IBM Bluemix, ANEKA .NET Cloud Computing Software IBM SPSS modeler-Clementine, Tableau. And FIST funded IoT setup and AICTE – MODROBS funded GPUs setup. The faculty and students of CSE has published, over 140+ research publications in International Journals / Conferences are listed in the Scopus database. 15 Patents have been filed / granted by faculty and students. There are 4 on-going research projects of worth 126.40 Lakhs and 78.03 Lakhs of funds for schemes by various government agencies including DST, AICTE, UGC etc. The students and faculty of CSE are actively participating in international exchange programs. Till now, 4 faculty and 6 students are visited various countries like Thailand, Singapore, Cambodia, Dubai.

About STTP

Smart environment development continues to attract huge interest and scope by various challenges to provide path for innovations. It creates big data from crowd sourced and sensed data through smart devices, Social networks and IoT. It aims to cover advanced computing techniques with emerging technologies and tools and to solve problems in smart environment.

Objectives

The participant will learn about:

- ✚ The various crowd sources of data available in smart environments.
- ✚ The advanced computing techniques to address the challenges.
- ✚ The emerging technologies and tools to compute the models

Key Features

- Role of Computing in Industry 4.0 Advances in Computing Techniques, Tools to solve problems in Smart Environment
- Crowd sources and sensed data Sources: IoT, Social networks Smart Devices – Real time Applications
- Artificial Intelligence Searching Methods
- Applied Machine Learning and Deep Learning with Python Libraries
- Soft Computing techniques and research Perspectives
- Cloud based platforms and Tools for data analysis on CPU/GPU platforms: Auto AI, IBM Watson Studio, Google Colab, Github
- Internet of Things (IoT), Cloud App Development, Cloud Native
- Demonstration on Tools: Data preparation, visualization and summarization with real time use cases using SAS-E Miner
- Time series data analysis - Demonstration on Tools: Advanced Data Visualizations using SPSS Moduler
- Demonstration on Tools: Data Modeling using classical algorithms with Excel Miner and Rattle
- Artificial Neural Networks variants - Deep learning model demonstrations – cyber security perspective
- Research Frontiers in Sustainable Smart Environments

Eligibility

UG / PG Faculty members from engineering colleges, PG students, Ph. D scholars and Industry Practitioners.

Benefits to Participants

On completion of the STTP, participants will get:

- ✚ Awareness on advanced computing techniques and tools and be able to apply in their academic and research activities.
- ✚ E-certificate will be provided to participants who attend all the sessions of the program and appear the online test as per the norms of AICTE

Resource Persons

- Dr. E Suresh Babu, Professor, NIT Warangal
- Dr. M Seetha, Professor of CSE, GNITS
- Dr. N Sandya, Professor of CSE, VNR VJIT
- Mr. Sai Sateesh, CEO, Indian Servers, AP.
- G Venkata Rajesh, Sn. Data Architect, United Health Group
- Mr. K Venkat Rao, Reach out Analytics Pvt. Ltd, Hyderabad
- Mr. Amarender Katkam, CEO, Smart Bridge Pvt. Ltd
- Mr. Pradeepthi D, AI Developer, Smart Bridge Pvt. Ltd.



Organizing Committee

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Sri. M Rajasekhar Reddy
Chairman, IARE

Sri. CH Sathi Reddy
Secretary and Correspondent
IARE, Hyderabad

Sri. B Rajeshwar Rao
Executive Director and Treasurer
IARE, Hyderabad

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Associate Professor, CSE

Dr. C Raghavendra
Associate Professor, IT

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on

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REGISTRATION FORM

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Organization:

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Mobile:

Email:

Experience:

Date:

Signature of the Candidate

Signature of the Head of the Department