#### **ABOUT JNTUA**

The College of Engineering, Anantapur was started at Guindy, Madras in 1946 and shifted to Anantapur in 1948. The college was initially affiliated to Madras University during 1946–1955 and to Sri Venkateswara University, Tirupathi during 1955–1972. In 1972, by an Act of State Legislature, JNT University was established at Hyderabad and the College of Engineering, Anantapur went into the fold of JNTU. Later in the year 2008, by an Act of AP State Legislature, JNTU was trifurcated into three independent universities viz., JNTU, Hyderabad, JNTU, Kakinada and JNTU Anantapur. JNTU College of Engineering, Anantapur became a constituent college of JNTUA and was renamed as JNTUA College of Engineering, Anantapur. The JNTUA College of Engineering, Pulivendula, established in the year 2006 and Oil Technology Research Institute (OTRI), Anantapur, established in the year 1948 also became constituent units of JNTUA. A new constituent college JNTUA College of Engineering, Kalikiri established in 2013 also came under the fold of JNTUA. The OTRI was later renamed as Oil Technology and Pharmaceutical Research Institute (OTPRI), in 2016. In addition to the above four constituent colleges, the JNTUA has 70 Engineering Colleges, 46 Pharmacy Colleges and 26 stand-alone MBA/MCA colleges affiliated to it. Since its inception, JNTUA is committed to develop and nurture technological education and intends to produce technical manpower of high quality, comparable to the best in the world.

# About college

Sri Sai Institute of Technology and Science (Autonomous), established in 2001 in Kasba Gollapalli Village, Rayachoti, Andhra Pradesh, is a leading institution affiliated with JNTUA and approved by AICTE. Spread across 26.49 acres, SSITS offers 14 programs in B. Tech, M. Tech, MBA, and Diploma.

#### Vision

To become a nucleus for pursuing technical education and pool industrial research and developmental activities with social-conscious and global standards.

#### Mission

- To provide Advanced Educational Programs and prepare students to achieve success and take leading roles in their chosen fields of specialization by arising a self-sustained University.
- To establish postgraduate programs in the current and Advanced Technologies.
- To establish an R&D Consultancy through developing Industry Institute Interaction, building up exceptional infrastructure.
- To propel every individual, realize and act for the technical development of the society.

# **About CSE department**

The Department of Computer Science and Engineering was established in the year 2001 with a B. Tech program and an initial intake of 60 students. In response to growing demand and consistent development, the intake was progressively increased to 120 in 2020, and currently stands at 210. and has established active student chapters such as ISTE, CSI, and IEEE to encourage student involvement in technical and co-curricular activities, fostering a vibrant academic culture.

#### **Chief Patron**

Prof. H. Sudarsana Rao Hon'ble Vice Chancellor, JNTUA, Ananthapuramu

#### **Patron**

Prof. S. Krishnaiah Registrar, JNTUA, Ananthapuramu

#### **Programme Director**

Prof. G. Prasanthi
Director, Faculty Development Center
JNTUA, Ananthapuramu

#### **Chair Persons**

Sri K. P. V. Subbaiah

Secretary & Correspondent

Sri. K. Sai Neeraj Kumar

Executive Director, SSITS

### **Programme Convenor**

Dr. V. Balaji Principal, SSITS Dr. M. Sudhakar Reddy

Asst-Director, SSITS

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Assistant Professor, Department of CSE, SSITS

Mr. Margani Harinadha

Assistant Professor, Department of CSE, SSITS Mr. Emmadi Radhakrishna

Assistant Professor, Department of CSE, SSITS

Mr Goram Sreenivasulu

Assistant Professor, Department of CSE, SSITS Mrs. Shaik Thasleema

Assistant Professor, Department of CSE, SSITS





# SRI SAI INSTITUTE OF TECHNOLOGY AND SCIENCE (AUTONOMOUS)

A Five-Day Faculty Development
Programme
on

Exploring the Foundations Al and Intelligent Systems through Machine Learning

06-10-2025 to 10-10-2025

Organized by

Department of Computer Science and

Engineering

and

Faculty Development Center
JAWAHARLAL NEHRU
TECHNOLOGICAL UNIVERSITY
ANANTAPUR
Ananthapuramu, Andhra Pradesh



https://www.ssits.ac.in

#### **About FDP**

The Faculty Development Programme (FDP) on "Al Foundations and Intelligent Systems" is a comprehensive initiative aimed at upskilling faculty members in the rapidly evolving domain of Artificial Intelligence (AI) and its core areas—Machine Learning (ML), Deep Learning (DL), and Natural Language Processing (NLP). As AI technologies become central to innovation in industries such as healthcare, finance, education, and smart systems, there is a growing need for educators to deliver academic content that is both conceptually strong and practically relevant.

This FDP is structured to offer a balanced mix of theoretical insights, hands-on sessions, pedagogical strategies, and research perspectives, all mapped to the Al syllabi of undergraduate and postgraduate programs. Faculty participants will be exposed to modern Al tools and frameworks such as Python, Scikit-learn, TensorFlow, PyTorch, and NLTK, along with case studies and demonstrations that highlight real-world applications of Al.

# **Objectives of FDP**

- 1. Equip faculty members with up-to-date knowledge and practical skills in Al, ML, DL, and NLP.
- 2. Enhance their ability to design, implement, and evaluate intelligent systems.
- 3. Enable integration of modern Al tools into undergraduate/postgraduate syllabi.
- 4. Support the development of lab content and student projects related to Al.
- 5. Foster research capability through the understanding of advanced AI algorithms and frameworks.
- 6. Promote effective teaching strategies tailored to complex Al topics.

# **Outcomes of FDP**

- 1. Understand foundational and advanced concepts of AI, ML, DL, and NLP.
- 2. Apply state-of-the-art tools (e.g., Scikit-learn, TensorFlow, PyTorch) in classroom and lab sessions.
- 3. Develop and deploy AI applications aligned with curriculum outcomes.
- 4. Guide students in AI projects, internships, and research publications.
- 5. Enhance curriculum delivery with practical demonstrations and project-based learning.
- 6. Initiate interdisciplinary AI research and contribute to publications in AI-related areas.

#### **Resource Persons**

The Faculty Development Programme will be enriched by contributions from eminent experts representing academia, research institutions, and industry. Their wide-ranging knowledge will ensure that participants benefit from a holistic learning experience that bridges theoretical foundations, technological progress, and hands-on applications

# **Session Topics**

**Day 1:** Introduction to AI: Definitions, History, Foundations, and Applications, Agents and Environments, the Concept of Rationality, the Nature of Environments, Structure of Agents, Problem-solving Agents, Problem Formulation

**Day 2:** Uninformed Search Strategies, Search with Partial Information, Game Playing – Adversarial Search, Hands-on: BFS, DFS, and Game Playing

**Day 3:** Knowledge Representation Issues, Predicate Logic, Semantic Nets, Bayes' Probabilistic Inferences and Dempster, Hands-on: Build Semantic Net or Rulebased KB + Bayes Classifier

Day 4: First Order Logic, Inference in First Order Logic, Unification, Forward Chaining, Backward Chaining, Resolution, Inductive Learning, Decision Trees, Explanation-Based Learning, Statistical Learning Methods, Reinforcement Learning, Hands on

**Day 5:** Architecture of Expert Systems, Roles of Expert Systems, Knowledge Acquisition, Meta Knowledge, Heuristics, Expert Systems Shells

#### Relevance

The rapid evolution of Artificial Intelligence (AI) and its subfields—Machine Learning (ML), Deep Learning (DL), and Natural Language Processing (NLP)—has made it imperative for educators to stay ahead of the curve. This FDP is highly relevant in today's academic and industrial landscape, where intelligent systems are driving innovation across domains such as automation, smart environments, predictive analytics, robotics, and language technologies.

By providing faculty members with both theoretical grounding and hands-on exposure to modern AI tools and frameworks, this program empowers educators to bridge the gap between curriculum and cutting-edge advancements. The sessions are carefully aligned with current AI syllabi across engineering and computer applications programs, ensuring maximum classroom and lab applicability.

## **Instructions to Participants**

#### **Target Audience**

The participant must be a teaching faculty from constituent and affiliated colleges of JNTUA, Ananthapuramu, as well as faculty from other institutions.

#### Guidelines

No Registration Fee.

Participants will be selected on First-Come First-Serve basis.

An evaluation test will be conducted at the end of the FDP.

Certificates will be issued based on the attendance percentage, test score and submission of feedback. Accommodation will be provided on request.

To register for the FDP, Scan the QR Code

# Registration



Click on the below Link

# https://forms.gle/Xy9pPKavem8TntUWA

#### **Event Details**

Mode of Conduct : Offline

Timing : 9:30 AM to 5:00 PM Venue : Seminar Hall(P), SSITS

Last date to apply for FDP : 1-10-2025 Confirmation to participants: 2-10-2025 Acceptance from participants: 3-10-2025

https://www.ssits.ac.in