JSS Mahavidyapeetha
JSS Academy of Technical Education
(AFFILIAED TO VTU BELAGAVI AND APPROVED BY AICTE NEWDELHI)
Dr. Vishnuvardhana road Bengaluru - 60

Department of Computer Science and Engineering

Organises

Faculty Development Programme on

"Artificial Intelligence and Machine Learning Techniques for Precision Agriculture"

10-10-2022 to 21-10-2022

Sponsored By

AICTE TRAINING AND LEARNING (ATAL) ACADEMY

Coordinator

Dr. Prabhudev Jagadeesh

Professor, Department of CSE

Co-Coordinator

Mr. Pradeep H.K

Asst. Professor, Department of CSE

About The Programme

Agriculture plays an important role in economy of any Nation. A stable agricultural Industry ensures a country for food security, source of income and source of employment. Economic advancement and increasing global population expand the demand for agriculture production. The growing need for food worldwide requires the development of a high-performance, high-productivity, and sustainable agriculture, which implies the introduction of new technologies into monitoring activities related to control and decision-making.

It is imperative that the only solution is to make efforts to maximize the per unit produce through technology-enabled agricultural practices. In this direction Precision agriculture solutions have shown promising results. Precision agriculture is a farming management concept based on observing, measuring and responding to inter and intra-field variability in crops. The goal of precision agriculture research is to define a decision support system for whole farm management with the goal of optimizing returns on inputs while preserving resources.

It is proven that AI and allied fields like ML, Deep Learning, Data mining and IoT techniques have potential to build intelligent and sensible systems for different agriculture applications. The AI methods exploit resistance for uncertainty, imprecision and ensure conformity, robustness and offers economical solutions.

At the national and international scenario there is a significant adoption of precision agriculture which includes AI, ML, Deep learning and IoT based solutions. This has taken the farming to the next level. Smart agriculture is already becoming more common place among farmers.

The main focus of this FDP is to sensitize participants with precision agriculture technology, the present status, benefits, and limitations of the state-of-the-art technologies used in Precision Agriculture.

Objectives of the FDP

- To enable the participants with the AI, ML and Deep Learning concepts.
- To enable participants to learn the Applications of AI & ML Concepts.
- To explore knowledge of precision agriculture with the aid of AI & ML Techniques.
- To gain knowledge and skills through research papers related to Precision Agriculture.
- To provide Hands-on sessions to gain practical knowledge through various AI and ML tools.

Programme Contents

- Introduction to Precision Agriculture
- Fundamentals and role of AI, ML and IoT in Precision Agriculture
- AI enabled smart agriculture: Architecture, Applications and Challenges
- Soft computing models.
- Advanced Computer vision algorithms for Precision Agriculture
- Hands-on/Demo of AI and ML tools.

Resource Persons

- Dr. M. S. Sheshshayee, Professor & Head Department of Physiology UAS, GKVK, Bengaluru.
- Dr. Milli Pant, Professor, Department of Applied Mathematics and Scientific Computing, IIT- Roorkee.
- Dr. S.N. Omkar, Chief Research Scientist, Control & Guidance, Aerospace Engineering, IISc, Bengaluru.
- Dr. D.S. Guru, Professor and Chairman, Department of Studies in Computer Science, University of Mysore, Mysuru.
- Dr. K Rajan, Principal Scientist, ICAR – IISWC, RC-Datia, Madhya Pradesh.
- Dr. Siddeswara Mayura Guru, Director, Data Science at Terrestrial Ecosystem Research Network, University of Melbourne, Australia
- Dr. Manjunath S, Leading Engineer, Samsung Electro mechanics India Pvt. Ltd, Bengaluru
- Dr. Shivarama Varamballi, Professor of Psychiatry, NIMHANS, Bengaluru
- Dr. Prabhudev Jagadeesh, Professor, JSS Academy of Technical Education, Bengaluru
- Mr. Pradeep H K, Assistant Professor, JSS Academy of Technical Education, Bengaluru
- Mr. Abhilash Manu, Innovation Leader, Ernst and Young, Bengaluru, India

Target Participants

As per the directives of ATAL Academy, the target audience includes faculty members of AICTE approved institutions, Research scholars and PG Scholars.

Registration

- No Registration Fee
- TA & DA will not be provided to the Participants. Accommodation can be provided in the College Hostels with nominal charge
- It is mandatory to submit the registration form in the enclosed format signed by the Head of Department/Institution by email to jssatebatalfdp@gmail.com
- Participants can register for this FDP on AICTE-ATAL website by following the steps below:

  Sign-up at https://atalacademy.aicte-india.org/signup (If the participant does'nt have an account as participant)

  Register as Participant

  Click on FDPs/CPDPs/Workshop Select Type as 'ATAL', Select Month as 'October', Select Thrust area as 'Thrust areas'

  Register for the Title "Artificial Intelligence and Machine learning Techniques for Precision Agriculture"

Test & Certificate

For details regarding Test, Attendance and Certificate please refer the ATAL scheme document https://atalacademy.aicte-india.org/assets/data/scheme_doc.pdf

Mode of FDP

10-10-2022 To 15-10-2022 ONLINE(7:00 PM To 9:30 PM)
17-10-2022 To 21-10-2022 OFFLINE (9:30 AM To 5:15 PM)

It is mandatory for the Participants to attend both Online & Offline Sessions of FDP

About the Institution

JSS Academy of Technical Education (JSSATE) established in the year 1997 at Bengaluru under the umbrella of JSS Mahavidyapeetha, Mysuru is a premier Institute which has completed 25 years of commendable service in the field of Technical and Management Education. JSSATE is the result of the vision of our President, His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji to proactively participate in establishing a world class Institution for Technical Education. The Campus is located in a sprawling 21.17 acres land surrounded by lush green plantation on the South-Western edge of Bengaluru City. Institution is affiliated to Visvesvaraya Technological University (VTU), Belagavi. At present JSSATE, Bengaluru has nine Under Graduate and two Post Graduate programmes in Engineering along with Post Graduate Program in Business Administration and Master of Computer Application. All the Departments have been recognized as "Research Centres" from VTU, Belagavi. Six UG programs are accredited by NBA, New Delhi. QS I-GAUGE, an autonomous body has accredited and conferred 'Gold Rating' to the Institute.

About CSE Department

The Department of Computer Science and Engineering was established in the year 1997, with the objective of imparting quality Education in the field of Computer Science and Engineering. The department is accredited by NBA with current intake of 180 Students. The department has to its credit a team of qualified, experienced and dedicated faculty, whose main aim is to equip students with the knowledge and expertise to grow professionally and contribute significantly to the society. The department is recognized as a research centre by Visvesyaraya Technological University, Belagavi. Faculty members are actively involved in publishing research papers in various International Journals and Conferences. Department regularly organizes Student development programmes, faculty development programmes, conferences and workshops. A continuous interaction with Industries is established through MoUs, Industry visits and Internships.

About ATAL Academy

AICTE Training And Learning (ATAL) Academy is committed for development of quality technical education in the country by initiating various schemes launched by Ministry of Human Resource Development, Govt. of India. Its vision is to empower faculty to achieve goals of Higher Education such as access, equity and quality. Main objective of ATAL Academies is to plan and help in imparting quality technical education in the country and to support Technical Institutions in fostering Research, Innovation and Entrepreneurship through training in various emerging areas.

CHIEF PATRON

His Holiness Jagadguru Sri Shivaratri Deshikendra Mahaswamiji

President, JSS Mahavidyapeetha, Mysuru

PATRONS

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Joint Director (TED), JSSMVP, Mysuru

CO-PATRON

Dr. Bhimasen Soragaon

Principal, JSSATE, Bengaluru

Coordinator

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Mobile no : 9886893897

Co-Coordinator

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Asst. Professor, Department of CSE

Mobile no : 9738456263

ORGANIZING COMMITTEE

Dr. Naveen N C

Professor & Head,

All Teaching and Non-Teaching Staff,

Department of Computer Science and Engineering

JSS Academy of Technical Education

Bengaluru - 560060

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Faculty Development Programme on "Artificial Intelligence and Machine learning Techniques for Precision Agriculture" 10-10-2022 to 21-10-2022

REGISTRATION FORM

Name:_____

Qualification: _____

Date of Birth: _____

Gender: _____

Designation: _____

Department: _____

Teaching/Industry Experince: _____

Organization: _____

Address: _____

_____

Mobile: _____

E- mail: _____

Signature of the Applicant

Sponsoring Authority

Mr./Ms./Dr. _____ is an employee of our organization and is sponsored to attend the FDP, if selected.

Date: _____ Signature of Principal/Head of Section