

ATAL Online 6 Days Faculty Development Programme 2024-25 Schedule



End Date: 14-12-2024

FDP Thrust Area: Engineering

FDP Title: ARTIFICIAL INTELLIGENCE APPLICATIONS IN RENEWABLE ENERGY SOURCES

Start Date: 9-12-2024

Day 1	Day 2	Day 3	Day 4	Day 5	Day6
6:00 PM to 6:30 PM	6:00 PM to 7:30 PM	6:00 PM to 7:30 PM	6:00 PM to 7:30PM	6:00 PM to 7:30 PM	2:00 PM to 3:30 PM
InauguralSession	Session3 Topic: Solar Panel Optimization using ML Mr.T.Muthukumaran, Deputy Manager NSIC-TSC,	Prof.JayadevGyani	Session7 Topic: AI for Predictive Maintenance Mr.Vijay Shanthagiri, Founder & CEO Analogica	Session9 Topic: Energy Policy and AI-Driven Decision Making Dr Ramulu Ch, Assistant Professor NIT Warangal.	Session11 Topic: Explainable AI for Renewable Energy Dr. M.M. Irfan, Head & Associate Professor Dept. of
	Hyderabad,Industry Expert.	Professorand DeanAcademics CSE AlMajmaUniversity,KSA- SaudiArabia	SDP LTd,Bangalore		EEE, SR University Warangal
6:30 PM to 8:00 PM	7:30 PM to 9:00 PM	7:30 PM to 9:00 PM	7:30 PM to 9:00 PM	7:30 PM to 9:00 PM	3:30 PM to 5:00 PM
Session1	Session4	Session6	Session8	Session10	Session12
Topic: Introduction to AI and ML in Renewable Energy Systems Dr.Surender Reddy Salkuti	Topic: Hydroelectric Power Plant Automation Dr. Pothuraju	Topic: Renewable energy Generation Forecasting Dr.Madan Kumar Das	Topic: AI and ML in Distributed Energy Resources (DERs) Dr.Venkataramana	Topic: Enhanced Geothermal System (EGS) Design and Biomass YieldPrediction using ML	Topic: Develop AI/ML models for renewable energy optimization.
Department of Railroad and Electrical Engineering, Woosong University, Republic of korea	Ramakrishna Assistant Professor NIT JALANDHAR	Assistant Professor-NIT- Jalandhar	Veeramsetty Associate Professor, Center for AI and deep learning, SR University wgl.	Dr.K.Ranjith kumar, Associate Professor VCE- Warangal	Dr.Yogesh Pundalik Professor &HOD-EEE , KITS Huzurabad
8:00 PM to 9:30 PM					5:00 PM to 7:30 PM
Session2					Session13
Topic: Wind Turbine					Topic: Environmental
Optimization using ML					Impact andAI's Role in Sustainability
Dr. D.Vinod Kumar					P.Venkata Sarath,CO-
Professor & Dean SR University Warangal					Founder & CEO, Enflare Technologies-Nellore
					6:30 PM to 7:30 PM Onlinetest&feedback
					7:30 PM to 8:00 PM ValedictorySession

About Institution

Jayamukhi Institute of Technological Sciences Sponsored by the Jayamukhi Educational Society, the Jayamukhi Institute of Technological Sciences came into being in 2001 to provide quality and contemporary education with social relevance in the engineering faculty with an ultimate vision to maintain global standards in higher learning and research. The Institute has the approval of AICTE and recognized by the Government of Telangana. It is permanently affiliated to Jawaharlal Nehru Technological University (JNTU), Hyderabad UGC Autonomous & accredited by NBA. The Institute has come upon 40 acres of green pastures in Narsampet, about 30km away from the historic city of Warangal and presents a picturesque and panoramic view. JITS offers a fouryear B.Tech. Programme in the disciplines of CSE, CSE (DATA SCICNCES), CSIT , CSE(AL&ML) ECE, EEE. CIVIL and ME.

About Department:

The Department of Electrical and Electronics Engineering was established in 2002.the Department offers a 4 years degree Program in Electrical and Electronics Engineering with an Intake of 60 Students. the department as received a grant Of RS.3.983 lakh from AICTE Sponsored STTP in the Academic year 2020-2021.The specialization of the faculty Includes power systems engineering, power electronics & Drives and control systems.

About FDP

The Faculty Development Program (FDP) on Artificial Intelligence Applications in Renewable Energy Sources aims to equip faculty members with the knowledge and skills necessary to integrate AI and ML into renewable energy Sources education and research. this FDP Improves teaching, research skills and also useful Networking opportunities with experts. Artificial Intelligence (AI),well known from computer science disciplines are beginning to emerge in the renewable energy sources.

Objectives

- 1. To Understand AI/ML fundamentals and applications in renewable energy.
- 2. To understand the new features of Machine Learning Model for primary solar Resource application of AI.
- 3. To meet the challenges of Machine learning model for wind direction and speed prediction
- 4. To focus on solving old problems such as estimation accuracy and resource allocation optimization in Renewable energy sources.
- 5. To Design of AI technology into Renewable energy sources such as how to reduce the complexity of AI algorithm to make it suitable for optimal design of renewable energy sources and so on are also important directions in the future.
- 6. To Develop AI/ML models for renewable energy optimization.

Topics to be Covered:

- 1.Introduction to AI and ML in Renewable Energy Systems
- 2. Wind Turbine Optimization using ML.
- 3. Renewable energy Generation Forecasting
- 4.AI for Predictive Maintenance
- 5.Al and ML in Distributed Energy Resources (DERs)
- 6. Energy Policy and Al-Driven Decision Making
- 7. Environmental Impact and Al's Role in Sustainability

Coordinator:

Mr.Anil Gottimukkula

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Cocoordinator

Mr.L.Raju

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JAYAMKHI

INSTITUTE OF TECHNOLOGICAL SCIENCES

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ATAL sponsored 6 days online Faculty Development Program on

ARTIFICIAL INTELLIGENCE APPLICATIONS IN RENEWABLE ENERGY SOURCES

09th DEC 2024 - 14th DEC 2024



Organized by

Department of Electrical and Electronics Engineering



Registration Fee:

Free online FDP Sponsored by ATAL

Register Now:

https://atalacademy.aicte-india.org/login

Important Dates:

Last date for Registration: 29th Nov 2024 **Notification of Selection: 30th Nov 2024**

After registration, selected participants will get online session details through registered emails.

Certificates will only be issued to those participants who have attended regularly and qualify in the online exam with minimum 70% marks.

Benefits to Participants:

This ATAL on Recent Artificial Intelligence 8.M.Krishnaveni.Assistant Prof. applications in Renewable energy sources is a new technological development in the field of engineering .your association will benefit with an outstanding exposure to the technology.

Level of Participants

Faculty working in AICTE approved institute having a zeal to rigorous research in the field of artificial intelligence applications Renewable energy sources industry and academia persons are eligible.

Chief Patron:

Dr.Ch.Devender Reddy, **Secretary and Correspondant**

Patron:

Prof.V. Janaki

Coordinator:

Mr. Anil Gottimukkula **Associate Professor and Head EEE**

Cocoordinator

L.Raiu Assistant Professor of EEE JITS

Organizing Committee:

- 1. Mr.B.Praveen. Assistant Prof.
- 2.Mrs.K.Sujatha, Assistant, prof.
- 3.Mrs.T.Anusha.Assistant Prof.
- 4.Mr.B.Sandeep Kum, Assistant Prof.
- 5.P.Kishore.Assistant Prof
- 6.B.ManiRaj, Assistant Prof.
- 7.V.Sudharshan, Assistant Prof.
- 9.N.Vinod, Assistant Prof.
- 10.N.Ramadevi.Assistant Prof.
- 11.P.Sumitha, Assistant Prof.

Address for correspondance

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Resource Persons

- 1.Dr.Surender Reddy Salkuti Department of Railroad and Electrical Engineering, Woosong University, Republic of korea
- 2. Dr. D. Vinod Kumar, Professor & Dean SR University, Warangal.
- 3. Dr. Pothuraju Ramakrishna Assistant Professor, NIT Jalandhar.
- 4. Mr.T.Muthukumaran, Deputy Manager NSIC-TSC, Hyderabad, Industry Expert.
- 5.Prof.JayadevGyani,ProfessorandDeanAcademics CSE AlMajmaUniversity, KSA-SaudiArabia
- 6. Dr. Madan Kumar Das Assistant Professor. NIT-Jalandhar
- 7.Mr.Vijay Shanthagiri, Founder & CEO Analogica SDP LTd.Bangalore
- 8. Dr. Venkataramana Veeramsetty Associate Professor. Center for AI and deep learning, SR University wgl.
- 9. Dr Ramulu Ch. Assistant Professor NIT Warangal.
- 10.Dr.K.Ranjith kumar, Associate Professor VCE-Warangal
- 11. Dr. M.M. Irfan. Head & Associate Professor Dept. of EEE, SR University Warangal
- 12.Dr.Yogesh Pundalik Professor & HOD-EEE, KITS Huzurabad
- 13.P. Venkata Sarath, CO-Founder & CEO, Enflare Technologies-Nellore
- 14.Mr.Ramchander.N. Director technical EV Retron Energies india Private Ltd. Sangareddy
- 15.Prof.V.Janaki ,Principal, JITS



Prof.V.Janaki Professor of CSE and Principal Experience: 30 Years Jayamukhi Institute of **Technological Sciences** Narsampet, Warangal-506332



Mr.Anil Gottimukkula Associate Professor and Head Department of EEE



Mr.L.Raju **Assistant** Professor of FFF

Overseas Resource Person:



Dr.Surender Reddy Salkuti Department of Railroad and Electrical Engineering, Woosong University, Republic of korea



Prof.JayadevGyani ProfessorandDeanAcademics Computer Science and Engineering AlMajmaUniversity, KSA-SaudiArabia

Industry Resource Person:



T.MuthuKumaran Deputy Manager NSIC -TSC, Hyderabad



Vijay Shanthagiri Founder & CEO Analogica SDP LTd, Bangalore



P.Venkata Sarath CO-Founder & CEO Enflare Technologies-Nellore



Mr.Ramchander.N, Director technical EV Retron Energies india Private Ltd. Sangareddy

Academic Resource Person:



Dr Vinod Kumar D M Professor and Dean Academics EEE SR University, Warangal





Dr Ramulu Ch Dr. Venkataramana Veeramsetty Dr. K. Ranjithkumar Assistant Professor Associate Professor, Center for AI Associate Professor and deep learning SR University. EEE VCE Warangal NIT Warangal





Dr YOGESH PUNDLIK Dr. Pothuraju Ramakrishna Professor & Head Assistant Professor NIT KITS Singapuram JALANDHAR



Dr. M.M. Irfan, Head & Associate Professor Dept. of EEE, SR University Warangal



Dr Madan Kumar Das Assistant Professor NIT Jalandhar