

REGISTRATION LINK:

<https://forms.gle/mRVu49Kov9kS874v6>

DATES TO REMEMBER:

Last date for applying: 15th November 2021

Confirmation of registration: 18th November 2021

ONLINE MEETING:

Participants are requested to attend the online sessions and discussion over ZOOM. The detailed schedule and meeting links will be sent to individual participants by an email after the completion of registration.

ABOUT VIT CHENNAI

VIT for the past 36 years has made a mark in the field of higher education in India imparting quality education in a multicultural ambience, intertwined with extensive application-oriented research. VIT was established with the aim to provide quality higher education on par with International Standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. VIT was established by a well-known educationalist and former parliamentarian, Dr. G. Viswanathan, Founder and Chancellor, a visionary who transformed VIT into a center of excellence in higher technical education. Govt. of India recognized VIT as an Institution of

Eminence (IoE). ARIIA, Govt. of India recognized VIT as a No. 1 Private University for Innovation. MHRD, Govt. of India ranked VIT as No.15 among the Engineering Institutions (NIRF-2020 ranking). VIT Chennai is ably spearheaded by Mr. Sankar Viswanathan, Vice President, Ms. Kadhambari S Viswanathan, Asst. Vice President, Dr. Rambabu Kodali, Vice Chancellor and Dr. V. S. Kanchana Bhaaskaran, Pro Vice Chancellor. They share in the mission to make VIT a global center towards academic and research excellence. VIT has also been accredited as A⁺⁺ grade by NAAC. The focus is:

- To maximize the industrial connectivity
- To create Centers of Excellence in contemporary areas of research
- To enrich technological and managerial human capital nurtured in a multicultural ambience
- To provide a common platform for the agglomeration of ideas of personnel from various walks of life for learning enrichment
- To create opportunities and exploit the available resources to benefit industry/society
- To encourage participation in the National Agenda of knowledge building
- To foster international collaborations for mutual benefits in areas of research



Presents

Online Faculty Development Program

on

**AI & ML Applications to
Power Systems
22nd to 26th November, 2021**

Organized by

School of Electrical Engineering

Coordinators

Prof. Meera P. S.

Prof. V. Lavanya

SELECT, VIT Chennai



**VIT – Recognized as Institution of
Eminence(IoE) by Government of India**

VIT – A place to learn; A chance to grow

ABOUT SCHOOL OF ELECTRICAL ENGINEERING (SELECT)

The School of Electrical Engineering (SELECT), at VIT Chennai, was established in 2010. Since the inception of the institute, the department has developed the state-of-the-art infrastructure for teaching and research. Smart Grid lab at VIT is unique of its kind in the country. The school has highly qualified and experienced faculty members. The school offers B.Tech. and Ph.D. programs in Electrical and Electronics Engineering. There are four major research groups: Power Systems, Power Electronics, Control & Instrumentation and Electrical Machines & Drives. The research findings of these groups are published in several peer reviewed International Journals with high impact factors. The school has always endeavored to contribute significantly to the growth of technical education.

The school has organized several workshops, seminars and guest lectures for the benefit of faculty members, students and research scholars of various educational institutions in and around the region. The school has also signed MoUs with various industries for collaborative working. Eminent professors from reputed Indian and foreign universities share their expertise for the benefit of the students. VIT – Electrical and Electronics Engineering appears in the top 251-300 of the QS World University Ranking by

subject and occupies 9th position in All India ranking in 2021.

ABOUT THE PROGRAM:

Many countries around the world have made a target for their energy system to be completely renewable. The renewable energy resources such as solar PV and wind turbine generation are incredibly dependent on various parameters like wind speed, wind direction, temperature, solar irradiation, humidity, etc. Thus, the outputs are highly stochastic in nature. Data science techniques for handling real-time big data can help the power system engineers in this scenario. Artificial Intelligence (AI) has the capability of self-learning from data with low dependence on mathematical models of physical systems, which provides an effective solution to break through the technical challenges. The availability of large datasets from wide area monitoring systems in transmission system and from sensors/ intelligent electronic devices in distribution system is one of the main driving forces behind the increased interest in AI and ML applications to power systems. The advancement in AI algorithms and the exponential growth in computational power also contribute to the recent advances in this field. Machine learning methods have been widely applied in power system operation and planning, such as load and wind speed forecasting, demand response, fault detection,

stability assessment, stability control and restoration. This FDP aims to discuss the various AI and ML applications to power system from a research perspective.

WHO SHALL ATTEND?

Faculty, Research scholars, Industry personnel, PG and UG students who are interested to know more about the various AI and ML applications to power systems can attend.

RESOURCE PERSONS

Experts specialized in the topic from renowned institutions like IITs, NITs etc.

FACULTY COORDINATORS

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