

Faculty Profile



Dr. Savitha V, M.E., Ph.D.
Assistant Professor (SG) / EEE

HIGHLIGHTS:

- Number of Publications: 10
- H-Index: 2
- Patents Published: 2
- Patents Granted: 2

PROFESSIONAL LINKS:

- Scopus ID: 60632164300
- Scopus Link: <https://www.scopus.com/pages/feedback/author/review-profile?authorIds=60632164300>
- Google Scholar ID: <https://scholar.google.com/citations?user=g9wjLdoAAAAJ&hl=en>
- AICTE Faculty ID: 1-43698754472
- LinkedIn: www.linkedin.com/in/savitha-venkatesan

PROFESSIONAL BACKGROUND:

- Teaching Experience: 15.6 years

AREA OF SPECIALIZATION:

- Renewable Energy Systems
- Power Converters
- Microgrids
- IoT
- IIoT
- Microcontrollers
- Control Systems

PATENTS PUBLISHED/GRANTED:

- ARTIFICIAL INTELLIGENCE BASED AUDIO ENABLED ENERGY METER SYSTEMS published in 19.04.2024
- PRECISION MARKETING WITH AI-DRIVEN CUSTOMER SEGMENTATION published in 30.08.2024

- SPRING BASED ENERGY GENERATION SYSTEM granted in 28.08.2025
- AUTOMATIC WATER PUMP CONTROLLER granted in 08.01.2026

PUBLICATIONS:

Journals:

- M Vaigundamoorthi, M Thirumalai, **S Venkatesan**, S Ranganathan, “A resilient and carbon-aware virtual power plant coordination framework for low-carbon energy systems using multi-objective optimization”, Energy Conversion and Management: X, May 2026
- T. Yuvaraj, D. Buvana, M. Thirumalai, **Savitha Venkatesan**, Mohit Bajaj, Vojtech Blazek, Lukas Prokop, “Artificial Intelligence–driven cyber–physical energy resilience framework for secure and sustainable smart distribution networks”, Energy Strategy Reviews, Elsevier, March 2026
- **Savitha Venkatesan**, Booma Nagarajan, Venmathi Mahendran, “Fast response NLC controller for high gain QRC in the wind-connected DCMG with reduced steady-state error”, International Journal of Electronics, Taylor and Francis, vol. no. 111, issue. no. 01, pg. no. 1-22, 2024, ISSN: 1362-3060. (Annexure-1) DOI: 10.1080/00207217.2023.2210304
- **Savitha Venkatesan**, Booma Nagarajan, “Compensation of Voltage Sag Using STATCOM”, International Journal of Engineering and Technology - UAE (IJET), March 2018
- **Savitha Venkatesan**, Booma Nagarajan, “Mitigation of Voltage sag using DSTATCOM in Distribution System”, International Journal of Scientific Research and Review (IJSRR) (UGC approved), March 2018

Conferences:

- Maheswari. S, Kalpana. S, Sripriya Ranganathan, **Savitha Venkatesan**, S. Subramanian, AI-Enhanced AR Wearable Technology for Memory and Cognitive Support in Dementia Care, International Conference on Trends in Quantum Computing and Emerging Business Technologies (TQCEBT) Pune, India, April 2026
- **Venkatesan Savitha**, Nagarajan Booma, Mahendran Venmathi, “Implementation of Improved KY-converter in 120V DC Microgrid”, Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies, December 2021
- **Venkatesan Savitha**, Nagarajan Booma, J Arul Prakash, B Swathi, H Janarthanan, A Salamathulla, R Karthik Sriram, “Design and Analysis of Closed Loop Control of DC-DC Boost Converter for Wind Energy Conversion System”, International Conference on Emerging Trends in Science, Engineering & Technology, March 2019

- **Venkatesan Savitha**, Nagarajan Booma, “Compensation of Voltage Sag Using STATCOM”, International Conference on Contemporary Topics in Electrical and Electronics Engineering, March 2018
- **Venkatesan Savitha**, Nagarajan Booma, “Mitigation of voltage sag in transmission line using Static synchronous compensation”, International Conference on Emerging Trends in Science, Engineering and Technology, March 2017

COURSES CERTIFIED:

- NPTEL - Yoga and Positive Psychology for Managing Career and Life
- NPTEL - Applied Positive Psychology

SPECIAL SESSIONS DELIVERED:

- Delivered a session in FDP on Control Systems.
- Delivered a session in FDP on Circuit Theory.
- Delivered a session in FDP on DC Machines.
- Delivered a session in FDP on IoT.
- Conducted and delivered in an event - Insights of Digital Electronics: A Practical approach.
- Conducted delivered in an event - LaTeX for Beginners: Mastering Scientific Writing.
- Organized a workshop - Real World Application and Skill Development Bootcamp 2026 and Industrial Integrated Product Development Training.

ACHEIVEMENTS AND AWARDS:

- Mentor for the NPTEL online certification course – Introduction to IoT.
- Earned an NPTEL certification in Applied Positive Psychology, ranking among the top 2% of learners.

PROFESSIONAL MEMBERSHIPS:

ISTE, IEI – M 162898-9