

Faculty Profile



Dr. Savitha V, M.E., PhD

Assistant Professor (SG)

HIGHLIGHTS:

- Number of Journal Publications: 4
- Book Chapter: 1
- H-Index: 1
- Patents Published: 4

PROFESSIONAL LINKS:

- Scopus ID: 56725840600
- Google Scholar ID: <https://scholar.google.com/citations?hl=en&user=g9wjLdoAAAAJ>
- Anna University Faculty ID: 263950
- AICTE Faculty ID: 1-43698754472
- LinkedIn: www.linkedin.com/in/savitha-venkatesan

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 15 years

AREA OF SPECIALIZATION:

- Power Electronics
- Renewable Energy Systems
- Smart grids
- Control Systems
- Programming Microcontrollers
- C Programming

PATENTS PUBLISHED/GRANTED:

- Published in 19/04/2024 and title is “ARTIFICIAL INTELLIGENCE BASED AUDIO ENABLED ENERGY METER SYSTEMS”
- Published in 30/08/2024 and title is “PRECISION MARKETING WITH AI-DRIVEN CUSTOMER SEGMENTATION”
- Granted in 28/08/2025 and title is “SPRING BASED ENERGY GENERATION”
- Granted in 08/01/2026 and title is “AUTOMATIC WATER PUMP CONTROLLER”

CONFERENCES/SEMINARS/WEBINARS/WORKSHOPS/FDPs ATTENDED:

● **CONFERENCEs Attended**

- “Mitigation of Voltage Sag in Transmission Line Using Static Synchronous Compensation”, International Conference on Emerging Trends in Science, Engineering & Technology (ICETSET’17) in Jerusalem College of Engineering on 17/03/2017 & 18/03/2017
- “Design and Implementation of STATCOM for Mitigation of Voltage Sag in Transmission Line”, International Conference on Advanced Functional Materials (ICAFM’17), in Adhi College of Engineering between 03/05/2017 and 05/05/2017
- “Compensation of Voltage Sag Using STATCOM”, International Conference on Contemporary Topics in Electrical and Electronics Engineering in Karpagam College of Engineering on 27/02/2018 & 28/02/2018
- “Mitigation of Voltage sag in Distribution System Using DSTATCOM”, National Conference on Emerging Trends in Science, Engineering & Technology (NCETSET’18), in Jerusalem College of Engineering on 18/03/2018

● **SEMINARs Attended**

- “Industrial Seminar” in Chip soft on 27/06/2016
- “Role of Power Electronics in Renewable energy systems” in MNM Jain Engineering College (Seminar) in 16/11/2016
- “Electric Drives and Challenges of Electric Transportation” in KCG College of Technology (In collaboration with Indian Railways and ABB) (Seminar) on 12/12/2017
- “Recent Trends in Renewable Energy” by Institute of Engineers (India) sponsored 2 days All India (seminar) in Jerusalem College of Engineering on 03/01/2018 & 04/01/2018

● **WEBINARs Attended**

- “Effective Technical writing: Thesis vs Paper” in Basaveshwar Engineering College (Autonomous), Bagalkot, Karnataka between 27/04/2020, 28/04/2020 & 29/04/2020
- “Converting Ideas into Research proposal” in Jerusalem College of Engineering on 01/05/2020
- “Artificial Intelligence Technique for Solving Engineering Problems” in PIRC on 08/05/2020
- “Research ideas and performance analysis of switched reluctance motor using Mag-Net software” in Jerusalem College of Engineering on 13/05/2020 & 14/05/2020
- “Power quality issues and its improvement techniques” in a grid connected system in Rajalakshmi Engineering College on 23/05/2020
- “The Art writing a scientific Article & its Nuances in high impact factor journals” in Prathyusha Engineering College on 25/05/2020
- “Internet of Things in Electrical Engineering” in Jerusalem College of Engineering on 30/05/2020
- “Power Conditioning System for Remote Microgrid & Reliability Assessment” in Jerusalem College of Engineering on 13/06/2020
- “Moodle Learning management systems” in Jerusalem College of Engineering on 24/06/2020

● **WORKSHOPS Attended**

- “Research Ideas in Power Electronics and Power Systems” in Jerusalem College of Engineering on 30/01/2013
- “Design and Analysis of Renewable Energy based Micro-Grid using HOMER and PV syst.” in Easwari Engineering College on 30/11/2016
- “Advances in Technology for Sustainable Guile Energy Based Applications” in St. Joseph’s College of Engineering (One Day National Level Workshop) 04/08/2017
- “Real Time System Simulation and Implementation Tools for Power Engineering Applications” in SRM Institute of Science and Technology 18/12/2017 to 22/12/2017
- “Integration of Renewable Resources - New CEA Guidelines for Solar and Wind Farms” in S.A. Engineering College on 25/08/2018 & 26/08/2018

● **FDPs Attended**

- “Signal Processing & its applications” in DMI College of Engineering on 26/11/2009 & 27/11/2009
- “Power Flow Solutions & Demo on CYME Power Engineering Software” in Sri Sairam Engineering College on 27/01/2011
- “Power Electronics for Green Energy” in Jerusalem College of Engineering (AICTE sponsored 2- weeks FDTP) between 15/04/2013 and 27/04/2013
- “EC2314- Digital Signal Processing” in SSN College of Engineering (Anna university approved FDTP) between 18/06/2014 and 25/06/2014
- “IC 6501-Control systems” in Jerusalem College of Engineering (Anna university approved FDTP) between 22/06/2015 and 29/06/2015

- “EE6004-Flexible A/C Transmission System” in Savitha Engineering College (Anna University sponsored FDTP) between 16/12/2015 and 23/12/2015
- “Use of Digital & Free Open-Source Tools in Teaching Learning” in Jerusalem College of Engineering (One Day Faculty Empowerment Program) on 18/05/2016
- “Design of Electrical Machines” in Jerusalem College of Engineering (Anna University approved FDTP) between 19/12/2016 and 26/12/2016
- “Design and Development of feedback controllers for Power Electronics Converters based Systems” in Karpagam College of Engineering (Three days National level FDTP) between 23/10/2017 and 25/10/2017
- “EE8251-Circuit Theory” in Jerusalem College of Engineering (Anna University approved FDTP 7 Days) between 27/11/2017 and 03/12/2017
- “Renewable Power Generation and Recent Embedded Controllers” in Rajalakshmi Engineering College (2 days FDTP in Association with IEEE Madras Section) between 14/12/2017 & 15/12/2017
- “Emerging Trends in Embedded Systems and its real time Applications” in St. Joseph’s College of Engineering (AICTE – ISTE Sponsored 6 days induction/Refresher Program) from 02/07/2018 to 07/07/2018
- “Applications of Power Electronics for renewable energy and power systems” in Rajalakshmi Engineering College (3 days FDP in Association with IEEE Madras Section) from 23/06/2020 to 25/06/2020
- “Hardware-in-the-Loop simulation: Learning and Teaching tool from Typhoon HIL” in School of Electrical Engineering (SELECT) Vellore Institute of Technology, Chennai from 31/08/2020 to 04/09/2020
- “Advanced Technologies in Electrical Engineering Research”, in Sri Sai Ram Institute of Technology, Chennai, 5-days Online FDP from 01/08/2022 to 05/08/2022.
- “Inculcating Universal Human Values in Technical Education”, in St. Joseph's College of Engineering, Chennai, 5-day Online FDP organized by All India Council for Technical Education (AICTE) from 18/12/2023 to 22/12/2023
- “Intellectual Property Right & Patent Drafting”, in AMET University, 9-days Online FDP (associated with Association of Indian Universities (AIU)) from 04/01/2024 to 12/01/2024
- “Opportunities and Challenges in Integrating Renewable Energy in EV Charging Infrastructure”, in Kongunadu College of Engineering and Technology, 6-days Online FDP from 24/06/2024 to 29/06/2024
- “Recent Trends and Advancement in integrated Power Systems”, in Bharath Institute of Science and Technology (in association with ATAL Academy) 6-days FDP from 16/12/2024 to 21/12/2024
- One week FDP on “IoT using Raspberry Pi & PLC” by EnthTech in Saveetha Engineering college” from 16/06/2025 to 21/06/2025
- “Artificial Intelligence’s Impact on Transforming Software, Robotics, Electrical, Electronic and Mechanical fields (Series 3)”, in Dhannish Ahmed College of Engineering, for 6-days FDP from 21/07/2025 to 26/07/2025.
- “Six days capacity Building Programme on Data to Design and Prediction to Creation” by Vel Tech Rangarajan Dr. Sagunthala R&D Institute of science & Technology in Collaboration with CEDAAR from 05/01/2026 to 10/01/2026.
- “Applied Machine Learning for Engineering Applications”, in Kangeyam Institute of Technology, for 5-days, from 21/01/2026 to 31/01/2026

- **Savitha Venkatesan**, Booma Nagarajan, “Mitigation of voltage sag in transmission line using Static synchronous compensation” in International Conference on Emerging Trends in Science, Engineering and Technology [ICETSET-2017] on 17th and 18th March 2017 at Jerusalem college of Engineering, pp 47.
- **Savitha Venkatesan**, Booma Nagarajan, “Design and Implementation of STATCOM for Mitigation of Voltage Sag in Transmission Line” in International Conference on Advanced Functional Materials [ICAFM’17] on 3rd - 5th May 2017 at Adhi college of Engineering and Technology, pp 63.
- **Savitha Venkatesan**, Booma Nagarajan, presented a paper titled “Mitigation of Voltage sag in Distribution System Using DSTATCOM” in National Conference on Emerging Trends in Science, Engineering & Technology (NCETSET’18), March 2018 Jerusalem College of Engineering.
- **Savitha Venkatesan**, Booma Nagarajan, presented paper on titled “Compensation of Voltage Sag Using STATCOM” in International Conference on Contemporary Topics in Electrical and Electronics Engineering, March 2018 in Karpagam College of Engineering.
- **Savitha Venkatesan**, Booma Nagarajan, Arul Prakash. J, Swathi. B, Janarthanan. H, Salamathulla. A, Karthik Sriram. R. “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 [ICETSET-2019] 22nd March 2019.
- **Savitha Venkatesan**, Booma Nagarajan, “Modelling and Simulation of Doubly Fed Induction generation for grid-connected systems”, International Conference on Emerging Trends in Science, Engineering & Technology [ICETSET-2019] 22nd March 2019.
- **Savitha Venkatesan**, Booma Nagarajan, Venmathi Mahendran, “Implementation of Improved KY-converter in 120V DC Microgrid”, “Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies” (ICETMCCT 2021) held in Annai Vailankanni College of Engineering, Kanyakumari, India on December 9, 2021.

JOURNAL PUBLISHED

- **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

- 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

LECTURES DELIVERED

- In Anna university approved 7-days FDTP on “Control Systems” held in Jerusalem College of Engineering during 22/06/2015 to 29/06/2015.
- Lecture delivered in FDTP on “Electrical Machine II”, in Jerusalem College of Engineering in 2016.
- Lecture delivered in Event Day conducted on 28.03.2024, on the topic “Insights of Digital Electronics: A Practical Approach”, in Saveetha Engineering College.
- Lecture delivered in Event Day conducted on 1.02.2025, on the topic “LaTeX for Beginners: Mastering Scientific Writing”, in Saveetha Engineering College.

EVENT ORGANISED

- Event Day conducted on 28.02.2026, on topic “Real World Application and Skill Development Bootcamp 2026 and Industrial Integrated Product Development Training”, in Saveetha engineering College.

ACHIEVEMENTS AND AWARDS

- Guided 4 UG Projects
- Awarded for 100% Result in subjects handled
- Awarded for High Percentage of results in subjects handled

PROFESSIONAL MEMBERSHIPS:

- IEI- M -162898-9

OTHER DETAILS (Academic Positions Held):

- Mentor
- Lab In-charge
 - Power System Simulation Laboratory
 - OOPS Laboratory
- College Day Coordinator (for 3 Years)
- Proctor Chief Coordinator (for 3 Years)
- Department NAAC Coordinator
- NBA Criterion-7 In-charge
- Exam-cell Dept. In-charge
- Class In-charge
- Staff and student File In-charge