

CURRICULUM VITAE



Dr. Kannan M.

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QUALIFICATION

Sl. No.	Qualification	Institution	Board/University	Percent age/ CGPA	Class
1.	Ph.D.	National Institute of Technology, Tiruchirappalli	Deemed (Roll No: 407119004)		
2.	M-Tech Power Systems	College of Engineering Thiruvananthapuram.	Kerala University	8.95	First Class
3.	B-Tech. Electrical & Electronics	Mar Athanasius College of Engineering, Kothamangalam, Ernakulam	Mahatma Gandhi University	80.9%	Distinction
4.	AISSCE	S. D. V. E. M. H. S. School, Alappuzha.	CBSE	83.8%	Distinction
5.	AISSE	S. D. V. E. M. H. S. School, Alappuzha.	CBSE	75.6%	Distinction

ACHIEVEMENTS

- ◆ IEEE Professional Member – 98741050 (Period: December 2022- December 2023)
- ◆ Co-ordinated the TEQIP-II sponsored three days Faculty Development Programme on “Solar Photovoltaics and Applications to Smart Grid” at LBSITW, Thiruvananthapuram from 25th to 27th July 2016.
- ◆ Officiated as a Programme Committee Member in the first International Conference on Computational Systems and Communications held at Thiruvananthapuram during 17-18 December 2014 organized by L B S Institute of Technology for Women.
- ◆ ISTE Life Member – No: LM 70440
- ◆ Energy Conservation Society (ECS) Life Member – No: 2673
- ◆ Associate Member – The Institution of Engineers (India) – No: AM100386 – 3
- ◆ Co-ordinated the ISTE – Sponsored three days Short Term Course on “Emerging Trends in Power Electronics and Systems” at Jyothi Engineering College, Thrissur from 1st to 3rd February 2012.
- ◆ Secured the Prize Paper Award at the 8th National Conference in Technological Trends at College of Engineering, Thiruvananthapuram on 30th November and 1st December 2007.
- ◆ Awarded the Degree of Rashtrabhasha Visharad for having passed the Rashtrabhasha Visharad examination in the year 1998 (Roll No: 11033) by Executive Committee of Dakshina Bharat Hindi Prachar Sabha, Madras.

PAPERS PUBLISHED & PRESENTED

- ◆ “A Combined DNN-NBEATS Architecture for State of Charge Estimation of Lithium-Ion Batteries in Electric Vehicles,” *IEEE Transactions on Vehicular Technology*, 72 (6), 7328-7337, June 2023.
- ◆ “State of Charge Estimation of Lithium-Ion Batteries Employing Deep Neural Network with Variable Learning Rate,” *Journal of Institution of Engineers-Series B*, 104(1), 277-284, February 2023.
- ◆ “State of Charge Estimation of Lithium-Ion Batteries Using Long Short-Term Memory and Bi-directional Long Short-Term Memory Neural Networks”. *Journal of Institution of Engineers-Series B*, 105, 175-182, 10.1007/s40031-023-00947-3, November 2023.
- ◆ **Presented a paper** titled State of Charge Estimation of Lithium-Ion Batteries Using Coulomb Counting and Model-Based Method in the 2nd International Conference on Recent Advancements in Engineering and Technology, ICORETech 2024, organised by LBS College of Engineering, Kasaragod and technically sponsored by ICT Academy, on 8th and 9th February 2024.
- ◆ “Partial Discharge Detection in Solid Dielectrics” *International Journal of Scientific and Engineering Research (IJSER)*, Volume 4, Issue 8, August 2013. ISSN 2229-5518.
- ◆ **Presented a paper** titled “Partial Discharge detection in Solid Dielectrics” in the *International Conference on Global Innovations in Technology and Sciences (ICGITS 2013)* held at Saintgits College of Engineering, Kottayam during 4th to 6th April 2013.

- ◆ “Study of Solid Dielectric Degradation Using Partial Discharge Test” *IEEE Conference on Electrical Insulation and Dielectric Phenomena*, October 26-29 2008.
- ◆ **Presented a paper** titled “Detection and Analysis of Partial Discharge in Dielectrics” in the 8th *National Conference on Technological Trends* held at College of Engineering Trivandrum during 30th November and 1st December 2007.

**FACULTY DEVELOPMENT PROGRAMME / SHORT TERM COURSE /
CONFERENCES ATTENDED**

- ◆ ATAL FDP from January 8th to 13th, 2024 in VLSI Design and Modeling at LBS Institute of Technology for Women, Thiruvananthapuram. (6 days)
- ◆ Faculty Development Program from August 21st to 25th, 2023 in “Recent Trends in Converters and Controllers in Electric Vehicle Applications” at Vellore Institute of Technology, Chennai.
- ◆ Faculty Development Programme sponsored by KTU from January 23rd to 25th, 2023 in “Deep Learning” at LBSCEK, Kasaragod. (3 days)
- ◆ GIAN Course in “Solar Energy Technologies” from 8th May 2017 to 18th May 2017 at National Institute of Technology, Tiruchirappalli. (11 days)
- ◆ Symposium on “Electrical Machines and Power Electronics” during 4th and 5th November 2016 at IIT Gandhinagar. (2 days)
- ◆ Faculty Development Programme from August 8th to 12th 2016 in “Technology Enabled Teaching and Learning” at IIM, Kozhikode. (5 days)
- ◆ Faculty Development Programme sponsored by TEQIP-II from July 25th to 27th 2016 in “Solar Photovoltaics and Applications to Smart Grid” at LBSITW, Thiruvananthapuram.(3 days)
- ◆ Short Term Training Program sponsored by TEQIP – II in “Recent Advances in Optical Communication” at L B S Institute of Technology for Women, Trivandrum from 18th to 20th July 2016.(3 days)
- ◆ Training Program in “Timeless Leadership – Ignite the Spark in your Heart” organized by Translational Research and Professional Leadership Center, Govt. Engineering College, Barton Hill from 27th to 30th June 2016. (4 days)
- ◆ Faculty Development Programme from 18th to 20th February 2016 in “Concepts Coaching” conducted by ICT Academy of Kerala at LBSITW, Thiruvananthapuram.(3 days)
- ◆ Faculty Development Programme organized and conducted by Teaching Learning Centre, IIT Madras from 3rd to 5th November 2015.(3 days)
- ◆ Intensive International Workshop in “Solar Photovoltaic Power Systems for Residential, Commercial and Off-Grid Applications” on 28th and 29th July 2015. (2 days)
- ◆ Short Term Course sponsored by TEQIP-II from 20th to 24th July 2015 on “Optimization Techniques for Engineers and Scientists” at LBSITW, Thiruvananthapuram.(5 days)
- ◆ National Conference on Advances in Computational Intelligence and Communication Technologies sponsored by TEQIP-II held at LBSITW, Thiruvananthapuram on 26th and 27th June 2013. (2 days)

- ◆ ISTE – Sponsored Short Term Training Programme on “Power Electronics and Drives – Technology Advances, Trends and Applications” at Mar Baselious College of Engineering and Technology, Thiruvananthapuram from 10th to 14th June 2013. (5 days)
- ◆ Short Term Training Program sponsored by TEQIP – II on “Research Methodology” at L B S Institute of Technology for Women, Trivandrum from 4th to 8th March 2013. (5 days)
- ◆ DTE Sponsored Short Term Training Program in association with IEEE and ISTE on “Methodology on Engineering Research ” at College of Engineering Trivandrum from 15th to 17th November 2012. (3 days)
- ◆ ISTE – Sponsored National Seminar on “Emerging Trends in Science and Current Affairs” at Jyothi Engineering College, Thrissur on 6th and 7th February 2012. (2 days)
- ◆ ISTE – Sponsored Short Term Course on “Emerging Trends in Power Electronics and Systems” at Jyothi Engineering College, Thrissur from 1st to 3rd February 2012. (3 days)
- ◆ ISTE – Sponsored Short Term Training Programme on “Electrical Systems Design” at Mar Baselious College of Engineering and Technology from 8th to 13th November 2010. (6 days)
- ◆ ISTE – Sponsored workshop on “Designing and Setting up Electrical Installations” at Jyothi Engineering College, Thrissur on 5th and 6th May 2010. (2 days)
- ◆ Mission 10X Workshop on “High Impact Teaching Skills” conducted by WIPRO at Jyothi Engineering College, Thrissur from 26th to 30th October 2009. (5 days)
- ◆ AICTE – Sponsored winter school Programme on “Students Counseling and Career Guidance” conducted by NITTTR at Toc-H Institute of Science and Technology, Ernakulam from 23rd to 28th March 2009. (6 days)
- ◆ Eighth National Conference on Technological Trends held at College of Engineering Thiruvananthapuram on 30th November and 1st December 2007.(2 days)
- ◆ Seventh National Conference on Technological Trends held at College of Engineering Thiruvananthapuram on 17th and 18th November 2006. (2 days)

ONLINE FACULTY DEVELOPMENT PROGRAMME / SHORT TERM COURSES ATTENDED

- ◆ 5 days online GIAN workshop on “Deep Learning Processor Architecture,” during 09th to 13th May 2022, organized by Department of Electronics and Communication Engineering, NIT Tiruchirappalli.
- ◆ 6 days online AICTE-ISTE Orientation/ Refresher Programme on “Battery Energy Storage System and It’s Management”, during 20th to 25th January 2022, organized by Department of Electrical and Electronics Engineering, Trinity College of Engineering and Research, Pune, Maharashtra
- ◆ One day online workshop on “SCI/Scopus Research Paper Writing and Publishing”, on 21st November 2021, organized by Educorp Centre for Research and Advanced Studies Pvt Ltd., Thiruvananthapuram, Kerala
- ◆ 2 days online FDP on “Machine Learning and Optimization Techniques for Renewable Energy Systems”, during 9th to 10th April 2021, organized by Department of Electrical Engineering, M. Kumarasamy College of Engineering, Karur

- ◆ 5 days online FDP on “Machine Learning - Concepts and Applications”, during 19th to 23rd April 2021, organized by Department of Computer Science and Engineering, National Institute of Technology Tiruchirappalli
- ◆ 5 days online FDP on “Practical challenges in the Design and Development of Electric Vehicles”, during 24th to 28th August 2020, organized by Department of Electrical Engineering, NIT Calicut
- ◆ 4 days Online “Hands-on Workshop using MATLAB and SIMULINK – Research Perspective”, during 1st to 4th September 2020, organized by Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru
- ◆ 5 days Online Center for Continuing Education (CCE) Programme on “Soft Computing Techniques for Emerging Applications”, during 5th to 9th October 2020, organized by the Department of Computer Science and Engineering, NIT Warangal
- ◆ 5 days TEQIP III Sponsored Online FDP on “Power Electronic Applications in Electric Vehicles and Energy Storage”, during 25th to 29th January 2021, organized by the Department of Electrical and Electronics Engineering, NIT Karnataka, Surathkal.
- ◆ “Flash Charging Technology for New Generation E-Bus” on 29 May 2020, organized by IEEE Student Branch, NIT, Tiruchirappalli.
- ◆ Five-day FDP on “Technological Advances in Power Switching Converters for Renewable Energy Sources and Fuel Cell Technology for E-vehicles” from 1st to 5th June 2020, organized by Department of EEE, Bapatla Engineering College, Bapatla.
- ◆ Five-day FDP on “Electric Vehicles: Exploring Inside the Box” from 8th to 12th June 2020, organized by Department of EEE, MEA Engineering College, Kerala.
- ◆ “Battery Management System for Electric Vehicles” on 13 June 2020 organized by IEEE Student Branch, NHCE, Bangalore.
- ◆ “The Art of Lithium-Ion Battery pack Design” on 14 June 2020 organized by Haritha TechLogix, Bangalore.
- ◆ ISTE sponsored webinar on “Intellectual Property Rights in Research: Knowing the Basics” on 17 June 2020 organized by Jyothi Engineering College, Kerala.
- ◆ “Reinforcement Learning – The Frontiers of Artificial Intelligence” on 27 June 2020, organized by IEEE Student Branch, NIT, Tiruchirappalli.
- ◆ “Understanding EV Charging Technology - Level 1” on 28 June 2020 organized by Haritha TechLogix, Bangalore.
- ◆ One-week AICTE sponsored workshop on “Introduction to PLECS Tool for Power Electronics Applications” from 2nd to 6th July 2020, organized by Department of EEE, VRS Engineering College, Andhra Pradesh.
- ◆ “Scientific Publishing” on 10 July 2020, organized by Mar Baselios College of Engineering and Technology, Kerala.
- ◆ 5 days online FDP on “Practical challenges in the Design and Development of Electric Vehicles”, during 24th to 28th August 2020, organized by Department of Electrical Engineering, NIT Calicut.
- ◆ 4 days Online “Hands-on Workshop using MATLAB and SIMULINK – Research Perspective”, during 1st to 4th September 2020, organized by Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru.

- ◆ 5 days Online Center for Continuing Education (CCE) Programme on “Soft Computing Techniques for Emerging Applications”, during 5th to 9th October 2020, organized by the Department of Computer Science and Engineering, NIT Warangal.
- ◆ 5 days online FDP on “Research Trends in Optics, Photonics and Nanotechnology”, sponsored by TEQIP-II during 9th to 13th November 2020, organized by L B S Institute of Technology for Women, Thiruvananthapuram.

EXPERIENCE

- ◆ As Asst. Professor in Jyothi Engineering College, Thrissur from 16.09.2008 to 11.12.2012 – 4 years 2 Months
- ◆ As Assistant Professor in LBS Institute of Technology for Women, Poojappura, Thiruvananthapuram, Kerala-695012 from 12.12.2012FN to 26.07.2019AN.
- ◆ On deputation for Ph.D (QIP) at N I T, Tiruchirappalli from 29.07.2019FN to 26.07.2022AN.
- ◆ As Assistant Professor in LBS College of Engineering, Povval, Muliya P.O., Kasaragod, Kerala-671542 from 27.07.2022FN to till date.

SUBJECTS HANDLED

- Electromagnetic Theory (2019 Scheme-KTU)
- Power Systems-I (2019 Scheme-KTU)
- Electrical Power Generation, Transmission and Distribution
- DC Machines and Transformers
- Basics of Electrical and Electronics Engineering

AREAS OF INTEREST

- ✓ Application of Deep Learning in Electric Vehicles
- ✓ Deep Neural Network
- ✓ Battery Energy Storage System and state estimation
- ✓ Energy Consumption and Management

INSTITUTE RESPONSIBILITIES

LBSITW, Thiruvananthapuram

- ❖ TEQIP-II (Four Funds) Equity and Assurance, Nodal Officer - May 2018-July 2019
- ❖ Member of College Council - June 2016 – July 2019
- ❖ Additional Chief Superintendent & Member, Exam Cell July 2015 to July 2019
- ❖ Electrical Maintenance Charge – December 2012 to July 2019
- ❖ Electrical Machines Lab Charge – December 2012 to July 2019
- ❖ Member of Timetable Committee
- ❖ Member of Student Grievance Cell
- ❖ Member of Anti-Ragging Cell
- ❖ Member of Discipline Committee
- ❖ Supervision of Electrical Works
 1. Electrification of building for Ladies Hostel, LBSITW
 2. Electrification of 3rd floor and standardization of existing wiring in the Amenities Block of LBSITW

3. Minor Electrification works for Center for Disability Studies, Trivandrum
4. Electrification of Various Buildings of LBSITW (6th floor of Main Building, Strength of Material Lab, Fluid Mechanics Lab & Workshop building)

LBSCEK, Kasaragod

- ❖ National Board of Accreditation, LBSCEK-Criterion 9 College-level coordinator
- ❖ Department of Electrical and Electronics Association- Faculty in charge (2022 Onwards)
- ❖ IEEE Power and Energy Society – Staff Advisor, LBSCEK – 2022-23
- ❖ Admission Committee Member – (2022 Admission)
- ❖ Timetable Committee Member – (2022 – 24)
- ❖ ICORETECH 2024 – Technical committee member
- ❖ Group Tutor – (2022-2026 Batch)
- ❖ Union Arts Club Staff Advisor for 2023-24

01.03.2024

Dr. Kannan M