

## Dr. Kannan M

Assistant Professor  
Dept. of Electrical and Electronics Engineering  
LBS College of Engineering  
Kasaragod, Kerala, India- 671542



### EDUCATION

- Ph.D.- National Institute of Technology, Tiruchirappalli - 2024
- M.Tech (Power Systems) - Kerala University- 2008
- B.Tech (Electrical & Electronics Engineering) - Mahatma Gandhi University- 2004

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: [kannanlbteee@gmail.com](mailto:kannanlbteee@gmail.com)

### RESEARCH INTERESTS

Application of Deep Learning in Electric Vehicles, Deep Neural Networks, Battery Energy Storage Systems and State Estimation, Energy Consumption and Management.

### PROFILES

**GOOGLE SCHOLAR** : <https://scholar.google.com/citations?hl=en&user=AUKRDlgAAAAJ>

**ORCID PROFILE** : <https://orcid.org/0000-0003-3483-2377>

**SCOPUS PROFILE** : <https://www.scopus.com/authid/detail.uri?authorId=58035861200>

**WEB OF SCIENCE PROFILE:** <https://www.webofscience.com/wos/author/record/LZE-3754-2025>

## PROFESSIONAL EXPERIENCE

- **LBS College of Engineering** | Kasaragod | Assistant Professor | 27 July 2022 to till date
- **National Institute of Technology** | Tiruchirappalli | Deputed for Ph.D. 29 July 2019 to 26 July 2022
- **LBS Institute of Technology for Women** | Thiruvananthapuram | Assistant Professor | 12 December 2012 to 26 July 2019.
- **Jyothi Engineering College** | Thrissur | Assistant Professor | 16 September 2008 to 11 December 2012
- **SCMS School of Engineering and Technology** | Ernakulam | Lecturer | 01 June 2005 to 17 January 2006

## SUBJECTS TAUGHT

- **UG Level**  
Analog Electronics, Electromagnetic Theory, Power Systems I, Introduction to Electrical and Electronics Engineering, Power Electronics

## ACHIEVEMENTS

1. Coordinated the 7th Dr. APJ Abdul Kalam Energy Quiz, held on September 3, 2024, at LBS College of Engineering, in association with the KSEB Engineers Association.
2. Coordinated Power Quiz, held on September 26, 2024, at LBS College of Engineering, in association with the KSEB Officers Association.
3. Coordinated the one-day workshop on “Energy standards and labelling” at LBSCEK organized by the association of EEE under the auspicious of Athul Energy Consultants, Thrissur on 28<sup>th</sup> February 2024.
4. Reviewer IEEE Transactions on Instrumentation and Measurement, IEEE transactions on vehicular technology, IEEE Transactions on Energy Conversion.
5. Awarded Doctoral degree from Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli on 19<sup>th</sup> January 2024.
6. Coordinated Mock Test for KEAM 2024-25 on 25<sup>th</sup> and 26<sup>th</sup> May 2024, held at LBS College of Engineering, Kasaragod.
7. Served as reviewer for International Conference on Recent Advancements in Engineering and Technology, Feb 08-09, 2024, LBS.

## MEMBERSHIPS IN PROFESSIONAL BODIES

1. ISTE
2. ECS
3. AMIE
4. IEEE (2023-24)

## JOURNAL/CONFERENCE PUBLICATIONS

1. “Ant Colony Optimised Extended Kalman Filter for Estimation of State of Charge Estimation of Lithium-Ion Batteries,” IEEE Transactions on Instrumentation and Measurement, 10.1109/TIM.2024.3502741, Nov 2024. - SCI - E
2. “Ant Colony Assisted Extended Kalman Filter for Estimation of State of Charge of Lithium-Ion Batteries in Electric Vehicles”, International Journal of Electric and Hybrid Vehicles, 16(2), 184-201, June 2024. <https://doi.org/10.1504/IJEHV.2024.138987>. - SCOPUS
3. “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, (Issue Date: Feb 2023), December 2022, <https://doi.org/10.1007/s40031-022-00848-x> - SCOPUS
4. “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, February 2023, DOI: 10.1109/TVT.2023.3242269 - SCI - E
5. “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(1), 175-182, (2024), November 2023. <https://doi.org/10.1007/s40031-023-00947-3> - SCOPUS

## FACULTY DEVELOPMENT PROGRAMS ATTENDED

1. “Accreditation and Outcome-based Learning” by IIT Kharagpur, NPTEL-MOOC- 8 weeks FDP, August 2024- October 2024 - Ministry of Education, Govt. of India
2. “Research Methodology” by IIT Madras, NPTEL-MOOC- 8 weeks FDP, July 2024- September 2024 - Ministry of Education, Govt. of India
3. “Energy and Developmental Issues” Workshop by AICTE-VAANI - 25 July 2024 and 26 July 2024.
4. “Arduino Projects using Tinker CAD”, Professional Development Programme, by NITTTR Chennai, Ministry of Education - 24<sup>th</sup> to 28<sup>th</sup> June 2024.
5. “Recent Trends in VLSI and MEMS”, by I2CS Research Group, IIIT Kottayam - 3<sup>rd</sup> to 7<sup>th</sup> June 2024.

6. “Geographical Information System Applications in Disaster Management”, Professional Development Programme, by NITTTTR Chennai, Ministry of Education - 19<sup>th</sup> to 23<sup>rd</sup> February 2024.
7. “VLSI Design and Modeling”, ATAL FDP by AICTE and LBSITW, TVPM - 8<sup>th</sup> January to 13<sup>th</sup> January 2024.
8. “Recent Trends in Converters and Controllers in Electric Vehicle Applications” by VIT, Chennai - 21<sup>st</sup> to 25<sup>th</sup> August 2023.
9. “Deep Learning” by KTU and LBSCEK, Kasaragod - 23<sup>rd</sup> to 25<sup>th</sup> January 2023.
10. Online GIAN workshop Deep Learning Processor Architecture, Department of ECE, NIT Tiruchirappalli 09.05.22 to 13.05.22
11. Online Orientation/ Refresher Programme on Battery Energy Storage System and Its Management, Department of EEE, Trinity College of Engineering and Research, Maharashtra, 20.01.22 to 25.01.22
12. Online FDP Machine Learning - Concepts and Applications, Department of CSE, National Institute of Technology Tiruchirappalli, 19.4.21 to 23.4.21
13. TEQIP III Sponsored Online FDP on Power Electronic Applications in Electric Vehicles and Energy Storage, Department of Electrical and Electronics Engineering, NIT Karnataka, Surathkal, 25.1.21 to 29.1.21.

## LIST OF EXPERT TALKS DELIVERED

1. Expert talk on “Battery Energy Storage System” at KSEB Engineers Association as a part of Engineers Day Celebration on 23.09.24.

## MAJOR ADMINISTRATIVE WORKS UNDERTAKEN

### *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 3<sup>rd</sup> 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 (6<sup>th</sup> floor of Main Building, Strength of Material Lab, Fluid Mechanics Lab & Workshop building )

***LBSCEK, Kasaragod***

- ❖ Co-ordinator - NBA Criterion 9 - College and Department Level
- ❖ Staff Coordinator - AICTE, 2024-25
- ❖ Observer for Examination (External) - APJAKTU
- ❖ Faculty in Charge-Department of Electrical and Electronics Association- (2022 Onwards)
- ❖ Member, Programme Assessment Committee (PAC)
- ❖ Member, Convocation Hospitality Committee - 2023, 2024
- ❖ Member, Floss Club
- ❖ Staff Advisor, IEEE Power and Energy Society - 2022-23
- ❖ Admission Committee Member - (2022, 2023, 2024 Admission)
- ❖ Timetable Committee Member - (2022-23, 2023-24, 2024-25)
- ❖ Staff-in Charge - Electronics Lab 2023-24, 2024-25.
- ❖ Member, Technical Committee - ICORETECH 2024
- ❖ Group Tutor - [2022 - 2026] Batch
- ❖ Staff Advisor - Arts - Union 2023-24.
- ❖ EV Club Staff in Charge, 2024-25.

30.12.24

Dr. Kannan M

