

BALAJI GUTTA

Department: **EEE**

College: **SESHADRI RAO GUDLAVALLERU ENGINEERING COLLEGE**

Phone No: **08674-273737 (Ext. 2183)**

Mobile: +91- 7285979569

E-Mail: gbalaji@gecgudlallerumic.in

RESIDENTIAL ADDRESS: Flat No.B3, Sri Ganesh Residency, Tadigadapa
Pincode: 521134

ACADEMIC QUALIFICATIONS: M.Tech (Electric Drives & Control), (Ph.D)

ACADEMIC REWARDS / ACHIEVEMENTS: *Nil*

PROFESSIONAL EXPERIENCE:

Designation	Institution	Period
Assistant Professor	Seshadri Rao Gudlalleru Engineering College	From 26-10-2007 to Till Date

PROJECTS GUIDED:

PhD	Post Graduation	Under Graduation
<i>Nil</i>	<i>13</i>	<i>28</i>

SPECIALIZATION:

1. Electrical Machines
2. Electric Drives
3. Control Systems

RESEARCH PAPERS / BOOKS:

BOOKS PUBLISHED IN PUBLICATIONS: *Nil*

PAPERS PUBLISHED IN JOURNALS:

1. **Title:** Multi-Objective Optimization Algorithm Based Bidirectional Long Short-Term Memory Network Model for Optimum Sizing of Distributed Generators and Shunt Capacitors for Distribution Systems

Journal: Inventions, MDPI, Volume 9, Issue 6, 114, November 2024.

<https://doi.org/10.3390/inventions9060114>. SCOPUS. Impact factor 2.1

2. **Title:** Speed Control of Photovoltaic Pumping System Employing PMSM Drive
Journal: Journal of Electrical Systems and Information Technology, 10,
Article number: 28, May 2023. <https://doi.org/10.1186/s43067-023-00098x>.
3. **Title:** Fault Classification of Three Phase Induction Motors using Bi-LSTM Networks
Journal: International Journal of Advanced Research in Computer Engineering &
Technology (IJARCET), Vol.4, Issue: 9, pp. 3601-3610, September 2015.
ISSN: 2278 – 1323.
4. **Title:** Closed Loop Speed Control of Phase Advanced BLDC Motor
Journal: International Journal of Scientific Engineering and Technology Research
(IJSETR), Vol.4, Issue: 37, pp. 8140-8145, September 2015. ISSN: 2319-8885.
5. **Title:** Torque Ripple Minimization in BLDC Motor using Fuzzy Logic Controller
Journal: International Journal of Eminent Engineering Technologies (IJOEET), Vol.2,
Issue: 2, March 2015.
6. **Title:** Direct Torque Control of BLDC Drives for Electrical Vehicle Application **Journal:**
International Journal of Research in Applied Science & Engineering
Technology (IJRASET), ISSN No: 2321-9653, Vol.2, Issue:12,
December 2014.
7. **Title:** Power Quality Improvement in a PMBLDCM Drive by Using PFC CUK converter
Journal: International Journal of Engineering Research & Technology (IJERT),
ISSN No: 2278-81, Vol.2, Issue:11, November 2013
8. **Title:** Modeling and Simulation of Residential Micro grid Application Integrated with
Full-Bridge Forward DC-DC converter
Journal: International Journal of Engineering Research & Technology (IJERT),
ISSN No: 2278-81, Vol.2, Issue: 11, November 2013
9. **Title:** A Novel Multilevel Inverter Topology for Induction Motor Drive
Journal: International Journal of Innovative Research & Development (IJIRD), Vol.1,
Issue 8, October 2012.
10. **Title:** A High Voltage Gain Switched Inductor Multilevel Boost Converter for PV
Applications
Journal: International Journal of Advances in Science and Technology (IJAST), Vol.5,
No.3, September 2012.
11. **Title:** Modeling and Simulation of Micro Turbine Based DG System Feeding Vector
Controlled Induction Motor (VCIM) Drive and Other Static Loads
Journal: International Journal of Advanced Engineering Sciences and Technologies
(JIAEST), Vol.9, No.2, August 2011.

PAPERS PUBLISHED IN CONFERENCES/WORKSHOPS: Nil

LIST OF WORKSHOPS ORGANIZED:

1. Acted as the Registration Committee member at International Conference on “Artificial Intelligence Techniques for Electrical Engineering Systems (AITEES-2022)” organized by Department of EEE, Seshadri Rao Gudlavalleru Engineering College from 06-05-2022 to 07-05-2022.
2. A two-day staff training program on "MATLAB Tools for Engineers – Hands on Experience " from 10-01-2017 to 11-01-2017.
3. A two-day workshop on “Design and Differentiate Sensors in Embedded Applications” from 14-03-2014 to 15-03-2014.
4. A student paper contest “PHASE-2k14” during SPECIAL GECFEST-’14 on 30-01-2014.
5. A “Continuous Training Programme on MATLAB” from 06-03-2013 to 16-03-2013.
6. A workshop on “An Introductory Course on MATLAB/SIMULINK” on 02-07-2012.
7. A student paper contest “Technophile” on 21-09-2011.

LIST OF WORKSHOPS /CONFERENCES /SEMINARS ATTENDED:

1. A one-week Faculty Development Programme (FDP) on “*PLC HMI (Human –Machine Interface) Design and Integration*” organized by Department of Electrical and Electronics Engineering, Seshadri Rao Gudlavalleru Engineering College from 01-07-2024 to 06-07-2024.
2. A one-week Faculty Development Programme (FDP) on “*Advances in Renewable Energy & Electric Vehicles*” organized by Department of Electrical and Electronics Engineering, Seshadri Rao Gudlavalleru Engineering College from 20-02-2023 to 24-02-2023.
3. A two-day workshop on “*Machine Learning: Concepts and Applications*” organized by R&D Cell, Seshadri Rao Gudlavalleru Engineering College from 30-06-2022 to 01-07-2022.
4. A one-day Faculty Development Programme (FDP) on “*Insights of NEP 2020 and Strategies for its Implementation*” organized by Academics Strengthening and Advancement Cell of Seshadri Rao Gudlavalleru Engineering College on 12-06-2022.
5. A one-day Faculty Development Programme (FDP) on “*Intellectual Property Rights*” organized by Internal Quality Assessment Cell (IQAC), Seshadri Rao Gudlavalleru Engineering College in association with Indian Society for Technical Education (ISTE) on 26-03-2022.

6. A one-week Faculty Development Programme (FDP) on “*Modelling and Simulation of Electrical Systems*” organized by Department of Electrical and Electronics Engineering, Seshadri Rao Gudlavalleru Engineering College from 28-02-2022 to 04-03-2022.
7. A one-week Faculty Development Programme (FDP) on “*Intelligent Control Techniques for Electrical Systems*” organized by Department of Electrical and Electronics Engineering, Seshadri Rao Gudlavalleru Engineering College from 31-01-2022 to 04-02-2022.
8. A one-week Faculty Development Programme (FDP) on “*Applied Research on Renewable Energy Sources and Micro grids*” organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College from 18-11-2019 to 23-11-2019.
9. A one-week Faculty Development Programme (FDP) on “*Application of Artificial Intelligence and Soft Computing Techniques to Electrical Engineering*” organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College from 12-11-2018 to 17-11-2018.
10. A two-day workshop on “*Green Energy & Smart Grids*” organized by Prasad V Potluri Siddhartha Institute of Technology from 20-07-2018 to 21-07-2018.
11. A one-day workshop on “*Simulation and Design of Electrical Circuits using My Rio and Analog Discovery 2*” organized by Prasad V Potluri Siddhartha Institute of Technology on 02-02-2018.
12. A one-week Faculty Development Program (FDP) on “*Power Electronics for Renewable Energy Applications*” organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College from 31-07-2017 to 05-08-2017.
13. A two-week ISTE STTP on “*Electric Power System*” conducted by Indian Institute of Technology Kharagpur from 03-07-2017 to 15-07-2017. This workshop was held under the National Mission on Education through ICT (MHRD).
14. A one-week refresher course on “*Basic Electrical Engineering*” organized by Gudlavalleru Engineering College from 19-06-2017 to 24-06-2017.
15. A two-day staff training program on “*MATLAB Tools for Engineers – Hands on Experience*” organized by Gudlavalleru Engineering College from 10-01-2017 to 11-01-2017.
16. A one-week workshop on “*Advanced Industrial Automation Training*” organized by Gudlavalleru Engineering College from 14-11-2016 to 18-11-2016.
17. A two-day national convention and national seminar on “*Intelligent System for more connected world: Internet of Things*” organized by The Institution of Engineers (India) Andhra Pradesh State Center from 24-10-2016 to 25-10-2016.

18. A one-week refresher course on “*Pedagogy on Machines and Power Systems*” organized by Gudlavalleru Engineering College from 09-06-2016 to 15-06-2016.
19. A one-week Faculty Development Program (FDP) on “*Emerging Trends in Research Areas of Electrical Engineering*” organized by Gudlavalleru Engineering College from 07-12-2015 to 11-12-2015.
20. A one-week Faculty Development Program (FDP) on “*ETAP Software Training and Its Applications*” organized by Gudlavalleru Engineering College from 02-06-2015 to 08-06-2015.
21. A two-week audit course (Ph.D) on “*Intellectual Property Rights and Patents*” organized by Jawaharlal Nehru Technological University, Kakinada from 16-05-2015 to 30-05-2015.
22. A two-week audit course (Ph.D) on “*Research Methodologies*” organized by Jawaharlal Nehru Technological University, Kakinada from 01-05-2015 to 15-05-2015.
23. A two-day national workshop on “*Recent Advances in Power and Industrial Drives (RAPID-2k15)*” organized by University College of Engineering Kakinada, JNTUK under TEQIP-II from 13-03-2015 to 14-03-2015.
24. A two-week ISTE workshop on “*Control Systems*” conducted by Indian Institute of Technology Kharagpur from 02-12-2014 to 12-12-2014. This workshop was held under the National Mission on Education through ICT (MHRD).
25. A two-day seminar on “*Recent Innovative Trends in Electrical Motors & Its Industrial Applications*” organized by Prasad V Potluri Siddhartha Institute of Technology from 20-02-2014 to 21-02-2014.
26. The complimentary Training / Orientation on “*MATLAB, Simulink & Related Tool Boxes for Engineering Education*” conducted by Akademy of Design & Architecture and Gudlavalleru Engineering College from 03-04-2013 to 04-04-2013.
27. A two-day ISTE workshop on “*Aakash for Education*” conducted by Indian Institute of Technology Bombay from 10-11-2012 to 11-11-2012. This workshop was held under the National Mission on Education through ICT (MHRD).
28. A two-day workshop on “*Advanced Power System Protection – Hands on Experience*” organized by Gudlavalleru Engineering College from 06-11-2012 to 07-11-2012.
29. A two-day workshop on “*Emerging Trends in Control of Electrical Drives*” organized by Gudlavalleru Engineering College from 22-06-2012 to 23-06-2012.
30. A two-day workshop on “*PSCAD*” organized by Gudlavalleru Engineering College from 30-05-2011 to 31-05-2011.
31. A one-day workshop on “*Application of Wavelets in Electrical Engineering*” organized by Gudlavalleru Engineering College on 23-10-2010.

32. An AICTE sponsored one day National seminar on “*Non-Conventional Energy Sources*” organized by Gudlavalleru Engineering College on 24-10-2009.
33. An AICTE sponsored National Conference on “*Emerging Trends in Electrical Engineering for Sustainable Development*” organized by Gudlavalleru Engineering College from 24-11-2008 to 26-11-2008.
34. An AICTE sponsored National level Workshop on “*Digital Signal Processor Applications to Modern Industrial Drives*” organized by National Institute of Technology, Warangal from 16-06-2008 to 28-06-2008.
35. An AICTE sponsored one day seminar on “*Power System Operation & Computer System Functions in Grid Management*” organized by Gudlavalleru Engineering College on 27-10-2007.

LIST OF ONLINE FDPs ATTENDED:

1. A six-day online faculty development program on “*Artificial Intelligence’s Impact on Transforming Software, Robotics, Electrical, Electronics & Mechanical Fields*” organized by Dhaanish Ahmed College of Engineering, Chennai from 05-08-2024 to 10-08-2024.
2. A five day online national level faculty development program on “*Exploring Machine Learning Cyber Security: Tools and Trends*” organized by Department of CSE, Sri Venkateswara College of Engineering, Chennai from 05-08-2024 to 09-08-2024.
3. A five day online national level faculty development program on “*Exploring Computational Intelligence*” organized by School of Computer Science and Engineering, VIT AP from 16-07-2024 to 20-07-2024.
4. A five day online faculty development program on “*Recent Trends in Renewable and Electric Vehicle Technologies*” organized by Department of Electrical and Electronics Engineering,, Lakireddy Bali Reddy College of Engineering, Mylavaram from 03-06-2024 to 07-06-2024.
5. A one-week Online Faculty Development Programme (FDP) on “*Intelligent Control of Electrical Systems Using Machine Learning*” organized by Department of Electrical and Electronics Engineering, Seshadri Rao Gudlavalleru Engineering College from 16-10-2023 to 20-10-2023.
6. A 40-hour Online Faculty Development Program on “*Advances in Optimization and Control of Electrical Engineering Systems*” organized by E&ICT Academy, NIT Warangal and Seshadri Rao Gudlavalleru Engineering College, Gudlavalleru from 11-07-2022 to 20-07-2022.

7. A five day online faculty development Program on “*Smart Grid Technologies and Renewable Energy Integration*” organized by Department of Electrical and Electronics Engineering, Godavari Institute of Engineering & Technology, Rajamahendravaram from 25-10-2021 to 29-10-2021.
8. A one-week AICTE sponsored Short Term Training Program on “*Automation and Intelligent Control of Electrical Systems – Phase-III*” organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College from 16-11-2020 to 21-11-2020.
9. A one-week AICTE sponsored Short Term Training Program on “*Automation and Intelligent Control of Electrical Systems – Phase-II*” organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College from 21-09-2020 to 26-09-2020.
10. A one-week AICTE sponsored Short Term Training Program on “*Automation and Intelligent Control of Electrical Systems – Phase-I*” organized by Department of Electrical and Electronics Engineering, Gudlavalleru Engineering College from 03-08-2020 to 08-08-2020.
11. A one-week national level online faculty development program on “*Cyber Security*” organized by Departments of CSE & IT of Gudlavalleru Engineering College in Association with CyberPsy from 22-07-2020 to 26-07-2020.
12. A one-week online national faculty development program on “*Applications of Optimization Techniques to Electrical Engineering*” organized by Gayatri Vidya Parishad College of Engineering for Women, Visakhapatnam from 22-06-2020 to 26-06-2020.
13. A one-week online faculty development program on “*Real Time Hardware in the Loop (HIL) Simulation for Power Electronics & Power Systems*” organized by Rajkiya Engineering College, Mainpuri in association with OPAL-RT Technologies & IEEE STB REC Mainpuri from 22-06-2020 to 26-06-2020.
14. A one-week online faculty development program on “*Applied Research in Electric Vehicle Technologies*” organized by Department of Electrical & Electronics Engineering, Gudlavalleru Engineering College, Gudlavalleru from 15-06-2020 to 20-06-2020.
15. A two-day online faculty development program on “*MATLAB and Simulink in Engineering Education*” organized by Andhra Pradesh State Skill Development Corporation (APSSDC) in collaboration with Capricot and Mathworks from 10-06-2020 to 11-06-2020.
16. A one-week national level online faculty development program on “*Online Teaching-Learning Processes using ICT Tools for Education 4.0*” organized by St. Vincent Pallotti College of Engineering & Technology, Nagpur in association with Computer Society of India from 08-06-2020 to 13-06-2020.

17. A one-week online national level faculty development program on “*Artificial Intelligence*” organized by Chalapathi Institute of Technology and Brain O Vision Solutions India Pvt. Ltd. from 24-05-2020 to 29-05-2020.
18. A two-week online faculty development program on “*Android Application Development*” organized by Andhra Pradesh State Skill Development Corporation (APSSDC) from 18-05-2020 to 30-05-2020.
19. A two-week online faculty development program on “*Internet of Things (IoT)*” organized by Andhra Pradesh State Skill Development Corporation (APSSDC) from 18-05-2020 to 30-05-2020.
20. A one-week online faculty development program on “*ICT Tools*” organized by Sree Vidyanikethan Engineering College, Tirupati in association with STP – IIT Bombay from 11-05-2020 to 16-05-2020.
21. A four-day online faculty development program on “*Digital Image Processing Using MATLAB*” organized by Synxa IT Pvt. Ltd in association with Skilltohire from 24-04-2020 to 27-04-2020.

LIST OF ONLINE WEBINARS ATTENDED:

1. An online webinar on “*Python for Power Electronics Applications*” organized by Dr.Mahalingam College of Engineering and Technology, Pollachi on 18-07-2020.
2. An online four-day webinar on “*Strategies for Effective Assessing and Teaching*” organized by Department of English, Gudlavalleru Engineering College from 13-07-2020 to 16-07-2020.
3. An online webinar on “*Introduction to MATLAB & Hands on Practice*” organized by Mandsaur University, Mandsaur on 11-07-2020.
4. An online webinar on “*Effective and Efficient Writing of Research Papers for Web of Science, Scopus Indexed Journal and Conference Papers using Typeset Research Studio*” organized by AISSMS College of Engineering, Pune on 01-07-2020.
5. An online webinar on “*Managing References in A Research Article Using Mendeley*” organized by Vishnu Institute of Technology, Bhimavaram on 26-06-2020.
6. An online webinar on “*Renewable Energy Resources – An Overview*” organized by New Horizon College of Engineering, Bengaluru on 14-06-2020.
7. An online webinar on “*Understanding the Fundamentals of Machine Learning*” organized by S.S.Agarwal Institute of Engineering & Technology, Navsari on 09-06-2020.

8. An online webinar on “*Impact of COVID in Engineering Education & Way Forward*” organized by Indian Society for Technical Education (ISTE) chapter, Gudlavalleru Engineering College, Gudlavalleru on 09-06-2020.
9. An online webinar on “*Power Intelligence & Asset Management in Smart Grids*” organized by Anurag University, Hyderabad on 30-05-2020.
10. An online webinar on “*Successful Steps towards High Quality Scientific Publications*” organized by Chalapathi Institute of Technology, Nellore on 18-05-2020.
11. An online webinar on “*e-vehicles for Sustainable Transportation*” organized by Geethanjali Institute of Science and Technology, Nellore on 14-05-2020.

LIST OF CERTIFICATION COURSES:

NPTEL Courses:

- Completed the course "Problem Solving through Programming in C" with a consolidated score of 87% and in top 5% of the course. Course offered by IITKGP during January-April 2022.
- Completed the course "Electrical Machines-I" with a consolidated score of 100% and topper of the course. Course offered by IITKGP during September-December 2020.
- Completed the course "Electrical Machines-II" with a consolidated score of 90%. Course offered by IITKGP during January-April 2020.
- Completed the course "Fundamentals of Electric Drives" with a consolidated score of 97% and in top 1% of total candidates. Course offered by IIT Kanpur during July-September 2019.
- Completed the course "Electrical Machines-II" with a consolidated score of 88% and in top 5% of total candidates. Course offered by IITKGP during January-April 2019.
- Completed the course "Fundamentals of Electrical Engineering" with a consolidated score of 95% and in top 1% of total candidates. Course offered by IITKGP during July-October 2018.
- Completed the course "Basic Electrical Circuits" with a consolidated score of 77%. Course offered by IITM during July-September 2017.

COURSERA Courses:

- Completed the course "Code yourself! An Introduction to Programming" with a consolidated score of 100%. Course offered by The University of Edinburgh and Universidad ORT Uruguay during June-July 2020.

- Completed the course "Introduction to Programming with MATLAB" with a consolidated score of 100%. Course offered by Vanderbilt University (United States) during April-May 2020.

edX Courses:

- Completed the course " Python1.1: Python Programming: Basic Skills" with a weighted grade of 96% in May 2024. Course offered by Codio.
- Completed the course " Machine Learning with Python: A Practical Introduction" in May 2024. Course offered by IBM.

GUEST LECTURES DELIVERED: *Nil*

MEMBERSHIP IN PROFESSIONAL BODIES:

1. Member of "The Institute of Engineers (India)" - Member number: M-1542885.
2. Member of "International Association of Engineers" (IAENG).
Member number: 128639.

CONSULTANCY ACTIVITIES: *Nil*

GRANTS FETCHED: *Nil*

PATENTS PUBLISHED:

- A patent titled "Cursor Controlling System for Information Processing Devices" is published on 16-09-2022. Application No: 202241051264