

### ***Personal Information***

Name	Dr. M Rupesh
Years of Experience	Teaching: 11 Years 10 Months Research: Nil Industry : Nil
Email Id	rupesh.m@bvrithyderabad.edu.in
CN Id	RM1105
Areas of Specialization	Power System Control & Automation.



### ***Educational Qualifications***

Doctoral Degree	Ph.D.	Electrical & Electronics Engineering Sciences, VTU, Belagavi, Karnataka
PG Degree	M.Tech.	Power System Control and Automation, JNTUH
UG Degree	B.Tech.	Electrical & Electronics Engineering, JNTUH

### ***Patents:***

Mr. R Guruswamy, Mr.M Rupesh, Ms. B Sujatha, Ms. K Bhavya Registered a Design Patent on “IoT Based Solar Powered Agriculture Robot” with Design No. 380905-001 on 07-03-2023.

### ***Papers Published***

#### ***International Journal Publications***

1. Ganney Poorna Chandra Rao, Puvvula Venkata Rama Krishna, Mailugundla Rupesh, Swathi Karike, Sathyanarayana Polisetty, Sareddy Venkata Rami Reddy, Jadapalli Sreedhar, “Reconfiguration of the radial distribution network using an artificial rabbits optimization approach” in “Bulletin of Electrical Engineering and Informatics”, Vol-13, Issue-6, pp:3888-3896
2. Ganney Poorna Chandra Rao, Pallikonda Ravi Babu, Mailugundla Rupesh , Puvvula Venkata Rama Krishna “Artificial rabbits optimization based reconfiguration and distributed generation allotment in the distribution network” International Journal of Power Electronics and Drive Systems (IJPEDS), Volume-15, Issue-3, September-2024, Pages: 1749-1756, ISSN: 2088-8694, DOI: 10.11591/ijpeds.v15.i3.pp1749-1756 (SCOPUS)
3. MRupesh, and T S Vishwanath, “Empyrean Promulgation Network for Improving the Power Quality using Squat PV System and Redeem Circuit ,” Journal of New Materials for Electrochemical Systems, October 2023, pages 284-297. (Scopus, SCI-indexed) DOI: <https://doi.org/10.14447/jnmes.v26i4.a07>

4. Mailugundla Rupesh, Vishwanath Shivalingappa Tegampure published a Paper titled "Cascade Feed forward Neural Network and Deep Neural Network Controller on Photovoltaic System with Cascaded Multilevel Inverters: Comparison on Standalone and Grid Integrated System" in "Journal of Mechatronics, Electrical Power, and Vehicular Technology" , vol. 13, no. 2, pp. 157-178, Dec. 2022. e-ISSN: 2088-6985.
5. Punna, Srinivas, Rupesh Mailugundla, and Surender R. Salkuti. 2022. "Design, Analysis and Implementation of Bidirectional DC–DC Converters for HESS in DC Microgrid Applications" *Smart Cities* 5, no. 2: 433-454. <https://doi.org/10.3390/smartsities5020024>
6. M Rupesh, Dr. T Vishwanath Shivalingappa, “Fuzzy and ANFIS Controllers to Improve the Power Quality of Grid Connected PV System with Cascaded Multilevel Inverter” in International Journal of Electrical & Electronics Research” Vol-9, Issue-4, Pg No-89-95, e-ISSN: 2347-470X (SCOPUS)
7. M. Rupesh, T. S. Vishwanath. “Intelligent Controller to Extract Maximum Power for 10KW PV System”, International Journal of Engineering, Transactions A: Basics Vol. 35, No. 04, (2022) 784-793, Feb-2022, doi: 10.5829/ije.2022.35.04a.18, e-ISSN: 1735-9244 (SCOPUS, WoS)
8. M Rupesh, Dr. T S Vishwanath, Dr. T Venkatesh Kumar “ Cascaded Feed Forward Multilayer Neural Network based MPPT Controller for Improving the Performance of Photovoltaic System” published in April 2021, Volume12, Issue 10, Turkish Journal of Computer and Mathematics Education (TURCOMAT), ISSN: 1309-4653, Pg. No: 7009-7019 (SCOPUS).
9. M Rupesh, T Namratha, N Maheshwari and N Bhavana “UPQC for Power Quality Improvement in Distribution System with Series Injected Transformers” published in June 2020, Volume 29, Issue 7, International Journal of Advanced Science and Technology, ISSN: 2207-6360 Pg. No: 8731-8742 (SCOPUS)
10. M. Rupesh, Dr. T Vishwanath Shivalingappa “ Evaluation of Optimum MPPT for PV System using MATLAB/Simulink” Published in June 2019, Volume 8, Issue 5, International Journal of Engineering and Advanced Technology, ISSN no-2249-8958 Pg. No: 1403 – 1408 (SCOPUS)
11. M Rupesh, Dr. T Vishwanath Shivalingappa “Comparative Analysis of P & O and Incremental Conductance method for PV System” Published in August 2018, Volume 7, Number 3.29. International Journal of Engineering & Technology, ISSN: 2227- 524X, Pg. No: 519- 523 (SCOPUS)
12. M Rupesh, G T Lakshmi Saranya, T Srilekha “Analysis of Solar based DC-DC Converter with MPPT”, published in July 2018, Volume 5, Issue 7 “International Journal of Current Engineering and Scientific Research”, ISSN: 2393-8374, Pg. No: 101-105

13. Bargava Ravali, B S Leepika, M Rupesh “ Economic Analysis of Rooftop Solar Power Plant at BVRITH – A Case Study” published in July 2017, Volume – 3 Issue- 7, International Journal of Modern Trends in Science and Technolohg” ISSN : 2455-3778, pg. No: 34-38
14. A Durgaprasad, M Rupesh Dr. Neelshetty K “Solar Photovoltaic (PV) Grid Integration Issues “ published in July 2016, Volume – 2 Issue- 7, International Journal of Modern Trends in Science and Technolohg” ISSN : 2455-3778, pg. No: 91-96
15. M Rupesh, A Durga Prasad, K Shuba Kulkarni “Modeling and Simulation of Hybrid Wind Power Control for Load Sharing” published in February 2015, Volume-4, Issue-2, “International Journal of Innovative Research in Science, Engineering and Technology” ISSN: 2319-8753, pg. No: 460-469
16. M Rupesh, N Srinivas “Design and Control of PV, Fuel cell based Microgrids under unbalanced Conditions” published in August 2013, Volume – 3, Issue – 2, “International Journal of Electrical & electronics Engineering” ISSN: 2231- 5184, pg. No: 40-49

### *International Conferences :*

17. Viviana Callea, Sivakumar Krishnan, Mihai Ursache, Rupesh M Presented a paper titled “Comparative analysis of a pilot experiment’s outcomes, at the Vishnu Educational Development and Innovation Centre, of the COACH\_ING model in use at the Sapienza Faculty of Civil and Industrial Engineering” in The 27th International Conference on Interactive Collaborative Learning (ICL 2024) and the 53rd IGIP International Conference on Engineering Pedagogy will be held in Tallinn, Estonia, on 25<sup>th</sup> September, 2024. Which will be published in Springer.
18. Mr. M Rupesh, K Shruthi Sree, A Nitya Sree Harshini, B vaishnavi, A Haripriys, Presented a Paper titled “Health monitoring and Mechanical Operation of Automatic Ventilator Using Patient Vital Parameters” in DST-SERB Sponsored International Conference on Mathematical Modelling and Emerging Trends in Computing (ICMMETC-2023) Organized by School of Technology, Woxsen University, Hyderabad on 23-25 June 2023.
19. Punna Srinivas, Dr. Chava Sunil Kumar, and M Rupesh Presented and Received Best Paper Ward for a Paper Titled” A Novel Controller for Multiple Input Bidirectional DC-DC Power Converter OF HESS for DC Microgrid Applications” in 7th International Conference on Information System Design and Intelligent Applications hosted by BVRIT HYDERABAD College of Engineering for Women on 25th -26th February 2022.
20. M Rupesh, Punna Srinivas, and Dr. Chava Sunil Kumar Presented a Paper Titled” Voltage Sag Mitigation and Power Quality Improvement using Fuzzy Controlled Dynamic Voltage Restorer” in 7th International Conference on Information System Design and Intelligent Applications hosted by BVRIT HYDERABAD College of Engineering for Women on 25th - 26th February 2022.

### ***National Journal Publications***

### ***National Conference Publications***

### ***Books Publishes / Book Chapters / Monographs: 01***

21. Rupesh, M., Swathi Chandana, J., Aishwarya, A., Anusha, C., Meghana, B. (2022). Prediction of Solar Power Using Machine Learning Algorithm. In: Hemanth, D.J., Pelusi, D., Vuppalapati, C. (eds) Intelligent Data Communication Technologies and Internet of Things. Lecture Notes on Data Engineering and Communications Technologies, vol 101. Springer, Singapore. [https://doi.org/10.1007/978-981-16-7610-9\\_39](https://doi.org/10.1007/978-981-16-7610-9_39)
22. Srinivas, P., Ch Sunil Kumar., Rupesh, M., Gurappa, B. (2023). A Novel Controller for Multiple-Input Bidirectional DC–DC Power Converter of HESS for DC Microgrid Applications. In: Bhateja, V., Mohanty, J.R., Flores Fuentes, W., Maharatna, K. (eds) Communication, Software and Networks. Lecture Notes in Networks and Systems, vol 493. Springer, Singapore. [https://doi.org/10.1007/978-981-19-4990-6\\_1](https://doi.org/10.1007/978-981-19-4990-6_1)

### ***FDPs Conducted:***

1. Co-Coordinator for AICTE Training and Learning Academy (ATAL) Approved and Funded Online One Week Faculty Development Program on “Challenges and Control of Green and Sustainable Energy systems using Artificial Intelligence techniques” Scheduled from 9th August 2021 to 13th August 2021.
2. Coordinated A One Week Online Faculty Development program on “Industrial Relevance of Electrical Engineering” by BVRIT HYDERABAD College of Engineering for Women, from 15th June to 20th June 2020.
3. Organizing member for Three Day Faculty Development Program on “Machine Learning and Its Application” at BVRIT Hyderabad College of Engineering for Women from 28th to 29th September 2019.

### ***FDP's Attended***

1. Attended One Week Online Professional Development program on “Developing Intelligent IoT Systems: From Sensors to Servers” from 22.07.2024 to 26.07.2024 sponsored by IEEE PELS Chapter, Vardhaman College of Engineering and in collaboration with The National Small Industries Corporation Ltd. Technical Service Center.
2. Attended One-week National Level Online Faculty Development Programme On “Greening the Grid” organized by MGIT from 17-05-2022 to 21-05-2022.
3. Attended five day Online FDP on “Tomorrow’s Electrical Power grid: Challenges, Trends and upcoming Paradigms” by St. Francis Institute Of Technology, Mumbai, from 3<sup>rd</sup> January 2022 to 7<sup>th</sup> January 2022.
4. Attended five day Online ATAL FDP on “Challenges and Control of Green and Sustainable Energy Sources using Artificial Intelligence Techniques ” by BVRIT HYDERABAD College of Engineering for Women, Hyderabad. From 9th August 2021 to 13th August 2021.

5. A Five Day Online Faculty Development Program on “AI Techniques to Electrical Engineering” by JNTU Hyderabad from 06<sup>th</sup> July 2020 to 10<sup>th</sup> July 2020.
6. Attended five day Online ATAL FDP on “AI Solution for Optimum Utilization of Power and Energy” by NIT Srinagar.. From 5th July 2021 to 9th July 2021.
7. Attended five day Online ATAL FDP on “RECENT TRENDS IN PRECISION AGRICULTURE” by Sant Longowal Institute of Engg. and Technology, Longowal. From 31st May 2021 to 04th June 2021.
8. Attended five day Online ATAL FDP on “Artificial Intelligence and green power technology” by Kamla Nehru Institute of Technology, Sultanpur.. From 14th June 2021 to 18th June 2021.
9. A Six Days Online Short Term Training Program (STTP) on “Solar PV Technology: Envisaged Future Challenges and Mitigation Methods for High Photovoltaic Penetration” by Paavai Engineering College, Namakkal, Tamilnadu from 23<sup>rd</sup> November 2020 to 28<sup>th</sup> November 2020.
10. A Five Day Online Faculty Development Program on “Real Time Applications of Opal RT for Power Electronics, Smart Grid and Microgrid” by Vellore Institute of Technology, Chennai, from 3<sup>rd</sup> August 2020 to 7<sup>th</sup> August 2020.
11. A Five Day Online Faculty Development Program on “Recent Trends in Electrical Engineering” by Vishnu Institute of Technology, Bheemavaram, AP, from 8<sup>th</sup> June 2020 to 12<sup>th</sup> June 2020.
12. A Five Day Online Faculty Development Program on “AI Solutions to Power System Problems” through Virtual Session by St. Peters Engineering College, Hyderabad from 2<sup>nd</sup> June 2020 to 6<sup>th</sup> June 2020.
13. A Five Day Online Faculty Development Program on “Implementation and Simulation of Electrical Engineering Applications using PLECS Tool” in Association with PLEXIM, Switzerland through Virtual Session by Vaagdevi College of Engineering from 25<sup>th</sup> May 2020 to 29<sup>th</sup> May 2020.
14. A Five Day Online Faculty Development Program on “Artificial Intelligence” through Virtual Session by BVRIT HYDERABAD College of Engineering for Women from 22<sup>nd</sup> May 2020 to 26<sup>th</sup> May 2020.
15. A One Week Faculty Development Program on “LaTeX” in Association with IIT- Bombay, Spoken Tutorial through Virtual Session by Sanjay Ghodawat University, Kolhapur, Maharashtra from 27<sup>th</sup> April 2020 to 2<sup>nd</sup> May 2020.

16. A Five Day Faculty Development Program on “Power Systems” at JNTUH from 23<sup>rd</sup> to 27<sup>th</sup> September 2019.
17. A Three Day Workshop on Student Learning in Instructional Design (SLID) at VEDIC from 30<sup>th</sup> July to 1<sup>st</sup> August 2019.
18. One Day workshop on Unconscious Bias in Work place (UBW) at BVRITH on 1<sup>st</sup> May 2019.
19. Two Week Faculty Development program on “Entrepreneurship”, sponsored by NSTEDB, Centre for Entrepreneurship Development (CED), An Undertaking of ALEAP-INDIA in BVRITH from 18<sup>th</sup> March 2019 to 30<sup>th</sup> March 2019.
20. Three Day Workshop on “Inspire- Impact- Introspect Level-1” in BVRITH from 18<sup>th</sup> to 20<sup>th</sup> March 2019.
21. Three Day Workshop on “ Advanced Research Training” at VEDIC, SVES from 24<sup>th</sup> to 26<sup>th</sup> July 2018
22. Three Day Work shop on “TTT (Think Technology Transformation)”, at VEDIC, SVES from 19<sup>th</sup> to 21<sup>st</sup> April 2018.
23. One Day International Conference on Entrepreneurship & Technology at BVRIT HYDERABAD on 3<sup>rd</sup> March 2018
24. Two Day Session on “Teaching Learning Methodologies” by Dr. Vijaykrishnan Narayan at VEDIC, SVES from 26<sup>th</sup> to 27<sup>th</sup> December 2017.
25. Five day workshop on “Litre of Light” at BVRIT Hyderabad from 12<sup>th</sup> October 2017 to 16<sup>th</sup> October 2017.
26. Three Day Work shop on “SEP (Scientific Educational Practice)”, at VEDIC, SVES from 27<sup>th</sup> to 29<sup>th</sup> April 2017.
27. Three Day Work shop on “SCM (Supply Chain Management)”, at VEDIC, SVES from 6<sup>th</sup> to 8<sup>th</sup> March 2017.
28. Two day Hands on training Session on “Photovoltaic Cell Modeling , Interconnection Schemes and MPPT Implementations” at VIT Vellore Organized by Solar Engineering Research Cell, VIT Vellore, from 21<sup>st</sup> to 22<sup>nd</sup> October 2016.
29. One Day faculty development program on Smart grids- Essential of Research organized by GNDEC Bidar, Karnataka on 30<sup>th</sup> July 2016.
30. Three day workshop on “MATLAB and its Application” at GNDEC, Bidar, Karnataka, from 5<sup>th</sup> to 7<sup>th</sup> April 2016.

### ***Certifications***

1. Completed and qualified as a teaching faculty in Employability Skill Development Program introduced by JSW MG Motor India Pvt. Ltd., under MG Nurture initiative from 2nd to 7th Sept'24.
2. Completed and Qualified as a teaching faculty in CAEV : Connected Autonomous Electric Vehicle Course introduced by JSW MG Motor India Pvt. Ltd Under MG Nurture Initiative from 12<sup>th</sup> August 2024, 22<sup>nd</sup> August 2024.
3. Certification on “EV - Vehicle Dynamics and Electric Motor Drives” Organized by NPTEL Swayam. March 2024.
4. Completed MATLAB Onramp on 15th July 2021.
5. Completed Simulink Onramp on 24th July 2021.
6. A 3 months Short term Course Certification on “Online Teaching” was Completed with Distinction by Indo Universal Collaboration for Engineering Education from July to September 2020.
7. Certification on “Control Engineering” organized by NPTEL
8. Coursera Certification on Exploratory Data Analysis with MATLAB, a 5 Week Course.
9. Coursera certification on Machine Learning Foundations: A Case Study Approach, 6 Week Course.
10. Coursera Certification on Electric Power System, a 4 Week Course.
11. Udemey Certification on Outcome Based Education (OBE) & Academic Quality Assurance on 1<sup>st</sup> April 2020.
12. Coursera Certification on Electric Utilities Fundamentals and Future, a 4 Week Course.

### ***Any Other Achievements***

1. Coordinated “Working Model Project Expo” on the Occasion of Engineers Day Celebration on 18<sup>th</sup> September 2024.
2. Certificate of Appreciation for acting as the InnoWAH Coordinator for the AY 2023-24 by IITM PALS. On 15<sup>th</sup> June 2024.
3. Visited and acted as NAAC Expert member for internal Audit in Shetty Institute of Technology, Kalaburgi, Karnataka on 15<sup>th</sup> July 2024.
4. Delivered a Guest Lecture on “Performance Analysis of PV System for Microgrid Application” on 1<sup>st</sup> February 2024 at Shetty Institute of Technology, Kalaburgi, Karnataka.
5. Coordinated Working Model Expo 2K23 on the Occasion of Innovation Day Celebration on 17<sup>th</sup> October 2023.
6. Coordinated Technical Contest “NAVEENA” on 15<sup>th</sup> September 2023.
7. Coordinated the National Level Student Fest Medhanvesh 2K23 conducted on 24<sup>th</sup> and 25<sup>th</sup> February 2023.
8. Coordinated Technical Contest “NAVEENA” on 15<sup>th</sup> October 2022.
9. Certificate of Appreciation for acting the InnoWAH Coordinator for the AY 2022-23 by IITM PALS.
10. Received Best Paper Award for Presenting a paper titled “ A Novel Controller for Multiple Input Bidirectional DC-DC Power Converter of HESS for DC Microgrid Applications” in INDIA Conference on 26<sup>th</sup> and 26<sup>th</sup> February 2022.
11. Coordinated the National Level Student Fest Medhanvesh 2K21 conducted on 25<sup>th</sup> and 26<sup>th</sup> November 2021
12. Coordinated Technical Contest “NAVEENA” on 27<sup>th</sup> October 2021.

13. Eighth International Conference on Transformation in Engineering Education(ICTIEE) -2021
14. Organizing member for Two Day International Conference on Entrepreneurship & Technology at BVRIT HYDERABAD on 3<sup>rd</sup> and 4<sup>th</sup> March 2018
15. Reviewer for International Journal of Renewable Energy Research (IJRER) - Online ISSN: 1309-0127.
16. Reviewer for Serbian Journal of Electrical Engineering (SJEE) Online ISSN: 2217-7183.
17. Reviewer of “Journal for Control, Measurement, Electronics, Computing and Communications”
18. Reviewer for “ARCHIVES OF ELECTRICAL ENGINEERING”

***Professional memberships:***

SAE INDIA Membership ID: 7230410263