## **Personal Information**

Name	Ms. Bhavya Kanchanapalli
Years of Experience	Teaching: 13 Years 6 months
Email Id	bhavya.k@bvrithyderabad.edu.in
CN ID	BK429
Areas of Specialization	Power Electronics



## **Educational Qualifications**

Ph.D	Pursing	JNTUK, Kakinada
PG Degree	M.Tech.	Power Electronics
UG Degree	B.Tech	Electrical & Electronics Engineering

#### Patent Published:

- 1. Managing EVs in the Smart Grid Using AI and secured IoT Technology. Application No. 202141053795.
- 2. A Method And System of Improving Cyber Security By Improved Prediction Potential Of Machine Learning Models. Application No.:202441020146 A
- 3. IoT BASED SOLAR POWERED AGRICULTURE ROBOT Application No. 380905-001

# Papers Published

#### International Journal Publications

- S. Banka, B. Kanchanapalli, N. K. Shaik, K. Dasari, D. Poojitha and A. Nalla, "Securing Fintech: A Machine Learning Approach for Credit Card Fraud Detection," 2024 International Conference on Cognitive Robotics and Intelligent Systems (ICC - ROBINS), Coimbatore, India, 2024, pp. 814-821, doi: 10.1109/ICC-ROBINS60238.2024.10533901.
- 2. **Ms. Bhavya Kanchanapalli**, Rama Rao Pokanati Veera Vekata, Ravi Srinivas Lanka, "Comparative performance analysis of DVR & DSTATCOM for distributed generation with gravitational search algorithm", Scientific and Technical Journal of Information Technologies, Mechanics and Optics, 2023, vol. 23, no. 3, pp. 635–645. doi: 10.17586/2226-1494-2023-23-3-635-645.
- 3. **Ms. Bhavya Kanchanapalli**, Rama Rao Pokanati Veera Vekata, Ravi Srinivas Lanka, "Analysis and Comparison of Performance of Interline Power Flow Controller with Various Control Algorithms under Various Power Stability Problems", Traitement du Signal Vol. 39, No. 5, October, 2022, pp. 1605-1613 Journal homepage: http://iieta.org/journals/ts
- 4. **Ms.K. Bhavya**, P. V. V. Rama Rao, L. Ravi Srinivas, "Performance Evaluation of Weighted Feedback Based UPQC under Various Power Quality Issues", IJE TRANSACTIONS C: Aspects Vol. 36, No. 03, (March 2023) 441-449.

- 5. **Ms. K.Bhavya** & Ms.B.Sushma, "A High Step Up DC-DC Converter for Photo Voltaic Applications", International journal for Modern Trends in Science and Technology (IJMTST), ISSN: 2455-3778, Vol.3, Issue 7, July 2017, PP 90-92, **IF:3.1**.
- 6. **Ms.K.Bhavya** & Ms.B.Sujatha "Simulation and Performance of AC Drives using SVPWM Technique", International Journal of Recent and Innovation Trends in Computing and Communication (IJRITCC), ISSN: 2321-8169, Vol.5, Issue 7, July 2017, PP 11-18,**SJIF:5.837.**
- 7. **Ms.K.Bhavya**, Mr.D.Srinivasa Rao & Mr.G.Akhil, "Enhancement of Power Quality in distribution system by Ultra Capacitor Integrated Power Conditioner" International Journal of Research (IJR), ISSN: 2348-6848, Vol-2, Issue-10, October 2015.
- 8. **Ms.K.Bhavya** & Ms.M.Supriya, "Single stage Five Level AC-DC converter for Power Factor Correction", International Journal on Electrical & Electronics Engineering (IJEEE), ISSN: 2319-8885, Vol.4, Issue-5, 2014.
- 9. **Ms.K.Bhavya** & Ms.G.Haritha, "Simulation of Fuel cell based Single Input Multiple Output (SIMO) DC-DC Converter for BLDC motor", International Journal of Engineering & Science Research, ISSN: 277-2685, Vol.4, Isue-10, Oct. 2014.
- 10. **Ms.K.Bhavya** & Ms.P.Sai Sree Sindhu, "A Novel PWM based Multi Level current generation using Inductor Cells and H-bridge Current Source Inverter" International Journal of Electrical & Electronics Engineering Research (IJEEER), Vol.3, Issue 5, Dec.2013, 101-114.
- 11. **Ms.K.Bhavya** & Mr.V.Madhu, "Measurement of Air Breakdown Voltage Using Standard Sphere Gap Method", Journal of Electrical & Electronics Engineering.
- 12. **Ms.K.Bhavya**, Mr.E.Vargil Kumar & Mr.V.Satya Srinivas, "A Two Input Single Output Z-Sourced DC-DC converter for Renewable Applications" International Journal of Modern Engineering Research (IJMER), Vol.2, Issue 5, Sep- Oct. 2012.
- 13. **Ms.K.Bhavya** & Mr.V.Madhu, "Breakdown Mechanism in Air Insulating medium by an experimental study" online journal ELIXIR, Elixir Elec. Engg. 47 (2012) 8832-8835 with ISSN: 2229-712X.

## International Conference Publications:

- 1. **Bhavya Kanchanapalli**, Sujatha Banka, Geetha Vani Bacchu, Dharani Nimmala, Aashritha Ganji, Rasagnya Begari, "**ESP32-Based Fan Speed Regulation System**", 2024 International Conference on Computational Intelligence for Green and Sustainable Technologies (ICCIGST-2024), Siddhartha Academy of Higher Education, Department of Electrical and Electronics Engineering in Association with Electronics & Communication Engineering and Electronics & Instrumentation Engineering, July 18<sup>th</sup> -19<sup>th</sup> 2024.
- 2. Ms.Sujatha Banka, **Ms.Bhavya Kanchanapalli**, Ms.Shaik Nafeesa, Ms.D.Khyathi, Ms.D. Poojitha and Ms.Nalla.Akshitha, "Securing Fintech: A Machine Learning Approach for Credit Card Fraud Detection,"in 2024 International Conference on Cognitive Robotics and Intelligent Systems (ICC-ROBINS), Coimbatore, India, 2024, pp. 814-821, doi: 10.1109/ICC ROBINS60238.2024.10533901.

- Ms.Sujatha Banka, Ms.Bhavya Kanchanapalli, Ms. Vidyadhari Gadde, Ms.Sai Meghana Sudhamalla, Ms.Vanitha Anantha, Ms.Pavanika Uppalapati "Smart Kitchen Monitoring System using IoT Technology," in 2024 IEEE International Conference on Automation and Computation (AUTOCOM), Dehradun, India, March 2024, pp. 303-307.
- 4. Mr.R.Guruswamy, **Ms.K.Bhavya**, Dr.K.Amritha, Ms.Banka.Sujatha, Ms.Babita Gupta presented the paper titled "Improvement in learning the concepts in technical education with the usage of vocabulary "in Two –day International Virtual Conference ELT in India: Tradition vs Innovation organized by BVRIT HYDERABAD College of Engineering for Women, Hyderabad on 6<sup>th</sup> and 7<sup>th</sup> July 2023.
- Ms.Bhavya Kanchanapalli, Ms. Sujatha Banka, Bhuvaneshwari Annam, Ms. Akhila Akula, Ms. Sripriya Thirukkovalluru, Ms. Swapna Jarpula, "A Novel Method for Fire Detection and Alarming Notification using IoT Technology", Proceedings of the Second International Conference on Electronics and Renewable Systems (ICEARS-2023). DVD Part Number: CFP23AV8-DVD; ISBN: 979-8-3503-4663-3.
- 6. Ms.K.Bhavya, Ms.B.Sujatha & Ms.P.Subhashitha, "Power Quality Enhancement in Distribution System using Ultra Capacitor integrated Power Conditioner", in 7<sup>th</sup> International Conference on Information System Design and Intelligent Applications hosted by BVRIT HYDERABAD College of Engineering for Women on 25th -26th February 2022.
- 7. **Ms.K.Bhavya** & Mr.V.Madhu, "Simulation of custom power devices uses PSCAD/EMTDC and MATLAB/SIMULINK for power quality improvement" in the International Conference on Computing and Control Engineering (ICCCE-2012).

#### National Conference Publications:

- Ms.K. Bhavya, Dr. P.V.V. Rama Rao, Dr. L. Ravi Srinivas, "Simulation of DSTATCOM for Distribution Generation based System with Various Algorithms", Proceedings of the 5th ISSE National Conference (INAC-05) on Systems Approach for Self-Reliance in Advanced Technologies(SASAT-2023),ISBN-978-93-95038-50-8, https://doi.org/10.37285/bsp.sasat2023.52.
- 2. **Ms.K.Bhavya**, Mr.K.Santosh kumar & Mr.V.Madhu "Analysis Of Custom Power Devices Using PSCAD/EMTDC" in the National Conference of SCSVMV University, Kanchi, TN with ISBN 978-93-5104-288-4.
- 3. **Ms.K.Bhavya**, Mr.K.Santosh Kumar & Mr.D.Vijay Arun, "simulation of DSTATCOM with PI & Fuzzy Based DC-link Voltage Controller" in the National Conference on Emerging Trends in Power Systems (NCETPS-2013).

#### **Book Chapter:**

1. Ms.Bhavya Kanchanapalli, Ms.Sujatha Banka ,"Power Quality Improvement in Distribution System" by IntechOpen publishers ,Feb,2024.

#### FDP's Attended:

- 1. Attended 12-week Faculty Development on "Design of Photovoltaic Systems" from July-Oct 2023 Organized by NPTEL.
- 2. Attended one week FDP on "Navigating the Future with Green Energy Resources, Smart Grid Technologies & Emission free Vehicle Infrastructure" from 22<sup>nd</sup> April to 27<sup>th</sup> April 2024 Organized by Department of electrical and Electronics Engineering, Vishnu Institute of Technology.
- 3. One Week Online AIU Sponsored Faculty Development Programme on "Outcome Based Education for Effective Learning and Teaching" during 19th July 27th July 2023 organized by AMET University.
- 4. Attended One-week Online Professional Development Programme on "Recent Advances and Challenges in Electric Vehicles" from 23<sup>rd</sup> October to 28<sup>th</sup> October 2023 organized by Department of Electrical and Electronics Engineering and IEEE PES CHAPTER in association with IEEE VCE SB, Vardhaman College of Engineering, Shamshabad-501218.
- 5. Attended one week Online FDP on "One week FDP on Outcome Based Education for Effective Learning and Teaching" organized by AMET University from 19-07-2023 to 27-07-2023.
- 6. Attended one week Online FDP on "Recent Trends in Green Energy Initiatives and Soft Computing Technique" organized by Mahatma Gandhi Institute of Technology (Autonomous) from 11-07-2023 to 15-07-2023.
- 7. Attending 5-Day FDP on Python for Electrical & Electronics Engineering: A Faculty Development Program for Python Applications" conducted by Rajeev Gandhi Memorial College of Engineering & Technology from 27-03-2023 to 31-03-2023.
- 8. Attended online FDP on "Application of Power Electronic converters to power and energy systems" from 14-11-2022 to 23-11-2022 at MATURI VENKATA SUBBA RAO ENGINEERING COLLEGE.
- 9. Attended AICTE Training And Learning (ATAL) Academy Blended/Hybrid FDP on "Simulation of Electrical & Electronics Engineering Systems" from 19-12-2022 to 24-12-2022 at the Department of ELECTRICAL & ELECTRONICS ENGINEERING and IEE PES chapter in association with IEEE VCE SB, Vardhman College of Engineering.
- 10. Attended One week online Elementary ATAL FDP on "Power Electronic Converters And Control For Renewable Power And Microgrid Systems" from 14/12/2021 to 18/12/2021 at Indian Institute of Technology Goa.
- 11. Attended One week online Elementary ATAL FDP on "Power Electronics for Power systems" from 06/12/2021 to 10/12/2021 at RIT, Kottayam.
- 12. Attended One week online Elementary ATAL FDP on "Challenges and Control of Green and Sustainable Energy systems using Artificial Intelligence techniques" from 09/08/2021 to 13/08/2021 at BVRIT HYDERABAD College of Engineering for Women.
- 13. Attended one week online AICTE sponsored STTP from 30th November to 5th December 2020 on "Technical Writing & Research Methodology", organized by Department of EEE, Chaitanya Bharathi Institute of Technology, Proddatur.
- 14. Attended One week online AICTE sponsored STTP from 23rd to 28<sup>th</sup> November, 2020 on "Recent Developments and Entrepreneurship in Sustainable Green Energy Technologies and Smart Grids" organized by Dept of EEE, B. V.Raju Institute of Technology, Narsapur.
- 15. Attended Five day Online Faculty Development Program on "Micro Grid: Fundamentals, Control and Stability Aspects", organized by Dept of EEE, G.Pulla Reddy Engineering College,

- Kurnool from 3rd to 7th August 2020.
- 16. Attended Online One-week FDP on "Industrial Relevance of Electrical Engineering" organized by BVRIT Hyderabad College of Engineering for Women from 15-06-2020 to 20-06-2020.
- 17. Attended Online One-week FDP on "Applied Research Technology in Electric Vehicles" organized by Gudlavalleru Engineering College, Gudlavalleru from 15-06-2020 to 20-06-2020.
- 18. Attended a One Week Faculty Development Program on "Implementation and simulation of Electrical Engineering Applications Using PLECS Tool" conducted by Vaagdevi College of Engineering from 25-05-2020 to 29-05-2020.
- 19. Attended a Online Faculty Development Program on "Multilevel Inverters and Modulation Techniques" conducted by International School of Technology & Sciences for Women from 18-05-2020 to 20-05-2020.
- 20. Attended Six day Online International FDP on "Research Challenges and Innovations in Renewable Energy Systems" from 11<sup>th</sup> May to 16<sup>th</sup> May 2020 from Aarupadai Veedu Institute of Technology, Paiyanoor, Chennai.
- 21. Attended six days National Level Online FDP on "Innovation to Academicians" from 11<sup>th</sup> May to 16<sup>th</sup> May 2020 from Ramachandra College of Engineering, Eluru.
- 22. Attended the Online Six day Faculty Development Program (FDP) from Sri Vasavi Engineering College (Autonomous), Tadepalligudem on "Research Challenges and Opportunities Post COVID-19 (RECOP 2020)" from 04<sup>th</sup> to 09<sup>th</sup> May 2020.
- 23. Attended the Online Five day Faculty Development Program (FDP) from Dr.N.G.P.Institute of Technology, Coimbatore on "Technological Advancement in Power System Control, Power Controllers, Drives &E-vehicles (TAPPAD-2020)" from 27<sup>th</sup> April to 01<sup>st</sup> May 2020.
- 24. Attended the Online One week Faculty Development program(FDP) from CMR College of Engineering &Technology, Hyderabad on "Research Opportunities in Power Engineering (ROPE)" from 22<sup>nd</sup> to 27<sup>th</sup> April 2020.
- 25. 8 Week NPTEL Online Certification course on "Advanced Power Electronics and Control" (AICTE Approved FDP Course) Conducted by IIT, Roorkee in Jan-March 2019.
- 26. Attended a One Week Faculty Development Program (FDP) on "IoT and Embedded System Design using NI Lab VIEW", during 18<sup>th</sup> to 22<sup>nd</sup> December 2017 organized by Department of Electrical & Electronics Engineering, BVRITH College of Engineering for Women.
- 27. Attended a 5 days' Workshop on "LITRE of LIGHT" in BVRITH College of Engineering for Women during 12<sup>th</sup> to 16<sup>th</sup> October 2017.
- 28. Attended a one week Faculty Development Program on "Open Source through Spoken Tutorials", IIT Bombay, during 29<sup>th</sup> June to 5<sup>th</sup> July 2017 organized by Department of Information Technology, BVRIT Hyderabad college of Engineering for Women.

### **Professional Memberships:**

- **❖** Member of IEEE (No: 99337101)
- ❖ Member of International Association of Engineers (IAENG), Hongkong (No: 11956).

## **Certifications:**

- ❖ Completed online course on "Safety in Utility Industry" from Coursera and got Certificate on 22<sup>nd</sup> May 2020.
- ❖ Completed online course on "Introduction to Solar Cells" from Coursera and got Certificate on 5<sup>th</sup> May 2020.
- ❖ Completed online course on "Electric Power Systems" from Coursera and got Certificate on 30<sup>th</sup> April 2020.
- ❖ Completed online course on "Solar Energy Basics" from Coursera and got Certificate on 29<sup>th</sup> April 2020.
- ❖ Completed online course on "Introduction to Psychology" from Coursera and got Certificate on 19<sup>th</sup> April 2020.
- ❖ Completed online course on "**Power System Protection**" under capability development from Tata Steel and got Certificate on 15<sup>th</sup> April 2020.
- ❖ Completed online course on "**Transformers**" under capability development from Tata Steel and got Certificate on 15<sup>th</sup> April 2020.
- ❖ Completed online course on "Power System Transmission and Distribution Part-1" under capability development from Tata Steel and got Certificate on 12<sup>th</sup> April 2020.
- ❖ Completed online course "Embracing Change" and got Certificate from Harappa Education on 7<sup>th</sup> April 2020.
- ❖ Completed Online course "MATLAB for Power Electronics: Simulation and Analysis" and got Certificate from Udemy on 6<sup>th</sup> April 2020.
- **❖** Completed Online course "Outcome Based Education (OBE) & Academic Quality Assurance" and got Certificate from Udemy on 29<sup>th</sup> March 2020.
- ❖ Completed Certification on "Advance Power Electronics & Control" organized by NPTEL on Jan-Mar 2019.
- ❖ Completed Certification on "Basic Electronics" organized by NPTEL on May 2018.

#### Webinars Attended:

- 1. Attended Webinar on "Evaluation of Diabetic Problems Using ML" on 01-10-2021 by Research and Development cell and IEEE SB UDBHAVA.
- 2. Attended Webinar on "Securing Your Research Paper form Hijacking" on 14-08-2020 by Department of CSE&IT from BVRIT HYDERABAD College of Engineering for Women.
- 3. Attended Two day Webinar on ""E-Resources for Teaching and Learning" organized by Avanthi Group of Institutions in association with IQAC, on 12<sup>th</sup> & 13<sup>th</sup> August 2020.
- 4. Attended Webinar on "Issues and Challenges in Wind Power Grid Integration" on 30-06-2020 by Siddhartha Institute of Engineering and Technology, Hyderabad.
- 5. Attended Webinar on "Power Converter Topology in Renewable Energy Sources" 06-06-2020 by NSRIT, Visakhapatnam.
- 6. Attended International Webinar on "Research Opportunities in Power Systems Employing Advanced FACTS controllers" Organized by Department of EEE, from Rajalakshmi Engineering College, Chennai on 12-06-2020.
- 7. Attended National Level Webinar on "Improvement of Power Quality using Custom Power Devices" from B.V.Raju Institute of Technology on 17-06-2020.

- 8. Attended International Webinar on "Android Mobile Application Development For Embedded And Iot Based Real-Time Projects Using MIT App Inventor" on 10-06-2020 by Department of EEE, from Rajalakshmi Engineering College, Chennai
- 9. Attended Webinar on "Best Practices in Operation & Maintenance of Solar Power Plants" on 03-06-2020 by BVRIT Institute of Technology, Hyderabad.
- 10. Attended a webinar on "Power Intelligence and Asset Management in Smart Grids" conducted by Anurag University on 30-05-2020.
- 11. Attended a webinar on "Research Aspects of Electric Vehicle Charging station and its effect on Distribution System" conducted by G.Narayanamma Institute of Technology & science (for Women) on 28-05-2020.
- 12. Attended a webinar on "Power Quality Issues and Challenges in Micro Grid" conducted by Gayatri Vidya Parishad College of Engineering for Women on 28-05-2020.
- 13. Attended a webinar on "Overview of Electrical Safety & Instrumentation" conducted by Miracle Educational Society Group of Institutions on 23-05-2020.
- 14. Attended a webinar on "State-of-the-Art Research in Power System and Drafting Research Article" conducted by Vaagdevi Engineering College on 27-05-2020.
- 15. Attended a webinar on "Need of IoT for Modern Electrical Engineers" conducted by SCAD College of engineering and Technology on 21-05-2020.
  - 16. Attended a webinar on "Effective methods for Reducing Fault Levels in Industrial Grid Networks" conducted by St. Martin's Engineering College on 18-05-2020.