

Dr. VENU GOPAL B. T.

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**111, Seef Residency, Near GR
Heights Apartments, BDA Layout,
JP Nagar 8th phase, Bengaluru-570076**

Profile:

Assistant Professor in the Department of Electronics and Communication Engineering at RV Institute of Technology and Management, Bengaluru. Alumnus of Siddaganga Institute of Technology (B.E. in E&C) and Sri Siddhartha Institute of Technology (M.Tech. in Computer Applications in Industrial Drives). Awarded Ph.D. from UVCE, Bangalore University on 11 March 2022. Former Senior Research Fellow at UVCE with research experience in AI-based control of induction motors, multilevel inverters, and PWM techniques. Possesses 4 years of industrial experience, 5 years of teaching experience, and 7 years of research experience, with consistently high student feedback exceeding 90%. Actively engaged in mentoring students, interdisciplinary research and innovative project development.

Research Interest:

Fuzzy Logic, Genetic Algorithm, DSP, AI, Power Electronics & Drives, MATLAB programming, Simulink, Neuro Fuzzy, Microcontroller, Robotics, Electric Vehicles, Deep Learning, IoT.

Educational Qualification:

Qualification	Specialization / Department	Institution	University	Year
Ph.D.	Artificial Intelligence & Power Electronics	Department of Electrical Engineering, UVCE, Bengaluru	Bangalore University	2022
M.Tech.	Computer Applications in Industrial Drives	Sri Siddhartha Institute of Technology, Tumakuru	Sri Siddhartha Academy of Higher Education	2013
B.E.	Electronics & Communication Engineering	Siddaganga Institute of Technology, Tumakuru	VTU	2010

Ph.D. Title: “Design and Implementation of Fuzzy Logic Control for 3 Phase Induction Motor Drive”

Date of Birth: 24-04-1987

Research ID's:

- **VTU Research Supervisor Registration ID:** 032023RSEC004435
- **Google Scholar ID:** <https://scholar.google.com/citations?user=tFjW0IMAAAAJ&hl=en>
- **SCOPUS Author ID:** 57207911707
- **Research Gate Link:** <https://www.researchgate.net/profile/Venu-Gopal-B-T>
- **Orcid ID:** 0000-0002-7456-5464

PhD Guidance:

- Guiding 2 Ph.D. Research Scholars as Co Supervisor under MAHE, Manipal Institute of Technology, Bengaluru from 2023-24.
- Guiding 2 Ph.D. Research Scholar as Supervisor under VTU, RVITM , Bengaluru, from 2024-25.

PROFESSIONAL EXPERIENCE:

Position	Organization	Duration
Assistant Professor	Department of Electronics and Communication Engineering, RV Institute of Technology and Management, VTU	3rd October 2022 – Present
Assistant Professor	Department of Electronics and Communication Engineering, Chennabasaveshwara Institute of Technology, Tumkur	8th November 2021 - 30th August 2022
Assistant Professor	Department of Electronics and Communication Engineering, Dr.SSMCE, Bengaluru Rural	12th April 2021 - 12th October 2021
Senior Research Fellow	Department of Electrical Engineering, UVCE, Bangalore University	03rd March 2017 - 11th March 2022
Junior Research Fellow	Department of Electrical Engineering, UVCE, Bangalore University	02nd March 2015 - 02nd March 2017
Project Associate	Vishwa Jyothi Technologies Pvt. Ltd., Bengaluru	1st July 2013 - 31st January 2015
Assistant Product Design Engineer	LIVEGREEN Technologies, Tumkur	1st August 2010 - 30th August 2011

Professional Membership: MIE , MISTE

- MIE (M-1819032),
- MISTE (LM 142287)

International Journal Publications:

1. B. T. Venu Gopal , E. G. Shivakumar, "Design and Simulation of Neuro-Fuzzy Controller for Indirect Vector-Controlled Induction Motor Drive," *Lecture Notes in Networks and Systems*, vol. 43, Springer, Singapore, pp. 155-167, 2019. doi: [10.1007/978-981-13-2514-4_14](https://doi.org/10.1007/978-981-13-2514-4_14)).
2. B. T. Venu Gopal, E. G. Shivakumar, H. R. Ramesh, "Design of Deep Learning Controller for Vector Controlled Induction Motor Drive," , *Advances in Intelligent Systems and Computing*, vol. 1079, Springer, Singapore, pp. 639-647, 2020. doi: [10.1007/978-981-15-1097-7_53](https://doi.org/10.1007/978-981-15-1097-7_53)
3. B. T. Venu Gopal , E. G. Shivakumar, "A Comparative Performance Analysis of Indirect Vector Controlled Induction Motor Drive Using Optimized AI Technique," *Journal of Computational and Theoretical Nanoscience*, vol. 17, no. 1, pp. 464-472, Jan. 2020. doi: [10.1166/jctn.2020.8692](https://doi.org/10.1166/jctn.2020.8692)
4. B. T. Venu Gopal, E. G. Shivakumar, H. R. Ramesh, "An Experimental Setup for Implementation of Fuzzy Logic Control for Indirect Vector-Controlled Induction Motor Drive," *Advances in Control Instrumentation Systems, Lecture Notes in Electrical Engineering*, vol. 660, Springer, Singapore, 2020. doi: [10.1007/978-981-15-4676-1_18](https://doi.org/10.1007/978-981-15-4676-1_18)
5. B. T. Venu Gopal, H. R. Ramesh, and E. G. Shivakumar, "Genetic-Neuro-Fuzzy Controller for Indirect Vector-Controlled Induction Motor Drive," *Advances in Intelligent Systems and Computing*, vol. 1133, Springer, Singapore, 2021. doi: [10.1007/978-981-15-3514-7_15](https://doi.org/10.1007/978-981-15-3514-7_15)
6. B. T. Venu Gopal, "Comparison Between Direct and Indirect Field Oriented Control of Induction Motor," *International Journal of Engineering Trends and Technology*, vol. 43, no. 6, pp.364-369, Jan. 2017.
7. Shishir Aithal, Manjunath K N, Sneha Hugar, Vishalakshi V, Venugopal B T , “ A Machine Learning Based Framework for Fake News Detection Using BERT, Logistic Regression and TF-IDF Vectorization “ , *Journal of Emerging Technologies and Research* , Volume 12, Issue 1, March 2025, P.No. 817-822.
8. R. L. Raghavendra, L. Parthasarathy, F. Francis, M. K. Chavan, R. K., A. V. Naik, and Venu Gopal B. T., "Modeling and Positioning D-STATCOM Using an Analytical Method Based on a Multi-Objective Function to Enhance Microgrid Power Quality," accepted for publication in *Journal of The Institution of Engineers (India): Series B*, manuscript ID: IEIB-D-24-00939R2, Apr. 2024
9. Deepika K S, Sravani, B. T. Venugopal, "Hybrid Localization Algorithms for Wireless Sensor Networks in 3D Environments to Enhance Accuracy in Positioning," submitted to *Journal of The Institution of Engineers (India): Series B*, manuscript ID: IEIB-D-25-00364, Mar. 2025.
10. A. Kumar, P. K. Bhadra, S. Mandal, S. Kumar, and V. B. T., “A review on head motion-controlled smart wheelchairs for hands-free mobility assistance,” *Int. J. Innov. Res. Sci. Eng.*

Technol., vol. 14, no. 7, pp. 17901–17910, Jul. 2025, doi: 10.15680/IJRSET.2025.1407108.

11. L. Raghavendra, L. Parthasarathy, F. Francis, M. K. Chavan, K. Rajesh, A. V. Naik, and B. T. V. Gopal, "Modeling and Positioning D-STATCOM Using an Analytical Method Based on a Multi-objective Function to Enhance Microgrid Power Quality," *J. Inst. Eng. (India): Ser. B*, Jul. 2025. [Online]. Available: <https://doi.org/10.1007/s40031-025-01078-6>

12. B. T. Venu Gopal, Shreedhara. Hareesh Kumar, Shalini J , Usha Rebecca, "Design of a deep learning-based controller for a 4-leg inverter to independently control two 3-phase induction motors," in *Emerging Science and Technolgy: Innovations for Future* , Taylor & Francis, ch. 37, 2025. doi: 10.1201/9781003685876-37.

International Conferences:

1. Venu Gopal B.T., E.G. Shivakumar, H.R. Ramesh, "Genetic Neuro Fuzzy Controller for Indirect Vector Controlled Induction Motor Drive," in *Proc. International Conference on Artificial Intelligence and Data Engineering (AIDE-2019)*, N.M.A.M. Institute of Technology, Nitte, in collaboration with Ritsumeikan University, Japan and Department of Studies in Computer Science, University of Mysore, May 23-24, 2019.

2. Venu Gopal B.T. and E.G. Shivakumar, "Experimental Setup for Implementation of Scalar Control for 3 Phase Induction Motor Drive using SVPWM," in *Proc. 2nd International Conference on Advances in Computing & Information Technology (IACIT-2020)*, Reva University, Bengaluru, April 29-30, 2020.

3. Venu Gopal B.T., Y. Kumar N., and E.G. Shivakumar, "15 Level Single Phase Multilevel Inverter Topology with Equal Area Criteria PWM Technique," in *Proc. 10th IEEE International Conference on Recent Engineering and Technology (ICRET-2020)*, New Horizon College of Engineering, Bengaluru, June 28, 2020.

4. Kaushik, Sumukh, Mridul, Ankush, and Venu Gopal B.T., "Coronary Artery Detection in Early Stages Using Machine Learning," in *Proc. 5th IEEE International Conference on Emerging Technology*, Jain College of Engineering, Belagavi, May 24-26, 2024.

5. Ahana V Kotri, Bharaths S Simha, Priyanka Y, Sai Sagar P, Nagananda R , Venu Gopal B T, "AI based home security" on 16th October 2025, *ICDTE-25* held at RVITM, Bengaluru

6. Lalitha, Vamshi Krishna B, Venu Gopal B T, Gururaj H L "Tomato leaf Stress Detection using Deep Learning Algorithm" on 17th October 2025, *ICDTE-25* held at RVITM, Bengaluru

National Conferences:

1. Kaushik, Sumukh, Mridul, Ankush, Venu Gopal B.T. "Dynamic Deep Learning Algorithm in Medical Diagnosis and Detection" , *National Conference on Digital Technology and Engineering (NCDTE-2024)*, RVITM Bengaluru May 2, 2024. **(Recieved Best Paper Award)**
2. Danamma Mallappa Simpi, Ananya B.S., Shubhashree T., Shubham S. Police Patil, Venu Gopal B.T. "Heart Attack Detection System with IoT Technology", *National Conference on Emerging Trends in Engineering, Science and Technology (NCETEST-7)*, RNSIT Bengaluru, Apr. 30, 2024.
3. Venu Gopal B T " Wibree Technology in Wireless Communication" , *National Conference on Advances i Computer Applications -NCACA 2013*, SSIT, Tumkur, 16th and 17th May 2013.
4. Venu Gopal B T, Ratnakar, "Design of an Intelligent Combat Using Wi-Fi with camera for Monitoring," , *National Conference on Recentb Advances in Electronics and Communication Engg*, RNSIT, Bengaluru, 3rd May 2013.
5. Venu Gopal B T, Suresh Babu G N, " GSM based Irrigation Water pump Controller for Illiterates", *National Conference on Advances in Signal Processing, Communication and Networking*, SSIT, Tumkur, 29th and 30th Agust 2013.
6. Venu Gopal B T, Ratnakar, " Control and Monitoring of an Intelligent Combat Using Zigbee with Camera for War fields", *Developments in the Domain of Electrical Engineering -2013*, SSIT Tumkur, 19th & 20th September 2013. (ISBN: 978-81-927765-0-1) .

PATENTS:

1. Mamatha N, Dr.Ramesh H R, Arpita banik, Arpitha T, Dr.Venu Gopal B T, Suresh Kumar H S , A system and Method For Common Mode Voltage and Total Harmonic Distortion Reduction in Three Phase 5 Level Asymmetrical Inverter Fed Induction Motor. Indian Patent Filed on 02nd August 2024, Application No. 202441058675
2. Kiran, Pushpavathi, Yuvaraja, Venu Gopal B T, Mohd Hamid Hussain, Ajmal, R T Ajaykarthik, SELF-OPERATING SMART TELESCOPIC FORK ASSEMBLY, DESIGN NO: 432386-001, Patent Grant date: 11/12/2024, Serai No. 186969
3. Dr. Shanthala, Vathsala M, N , Chetan Balaji, Anusha, Adarsh, Rakesh, Raghavendra, Venu Gopal B T, Electrical Parameter Measuring Device for Electric Vehicles , Patent Grant Date: 28/12/2024, Patent Design No: 442344-001.
4. Dr.Nataraj V, Dr.S Satyanarayana Reddy,Dr.Venugopal B T, Nagesh M , "UV-VISIBLE SPECTROPHOTOMETER" Indian Patent filed on 15/01/2025 DESIGN NO. 444284-001, Published on 26/03/2025.

5. Solaimuthu, Manjunath yadav, Mrunalini, Kavitha, Kumaresh, Divyamani, K Sunitha, Venu Gopal B T, " A system and a method for Adaptive Speed Limit Adjustment" , Application No. 202541070958 Published Date: 01/08/2025
6. Supriya, RAjesh, Manjunath, Samuel, Venu Gopal , Ananthapadmanaba, Jayanthi, Navaneethkrishnan, Vijaykumar, "Facial Emotion Recognition Using Support Vector Machines in Affective Computing", Indian patent Published on 03/10/2025. Application No. 202541087109

PROFESSIONAL TRAININGS:

- Participated in workshop on Digital Controlers For Power Electronic Converters And Systems , Institution held at PESIT, during Apr 11, 2016 - Apr 13, 2016
- Participated in workshop on Issues And Challenge in Solar And Wind Power Generation and Utilization, institution at SIT Tumkur, during Jan 04, 2017 - Jan 07, 2017.
- Participated in workshop on Advanced Reconfigurable FPGA Architecture for Research and Industrial Applications held at PESIT during Nov 24, 2016 - Nov 26, 2016.
- Participated in workshop on Real Time Simulation For Power Electronics Power Systems , Control And Instrumentation Using Labview held at UVCE during Mar 28, 2016 - Apr 01, 2016.
- Participated in workshop on Machine Learning at SVCE, during Jul 25, 2018 - Jul 27, 2022 · Participated in Soft Skills Training: Road Map to Success held at SIT Tumkur, during Aug 03, 2005 - Aug 11, 2005.
- Participated in feel employable training: held at SIT Tumkur during , Oct 05, 2005 - Oct 06, 2005 And Apr 18, 2005 - Apr 19, 2005.
- Participated in workshop on Electric Vehicles held at Siddaganga Institute Of Technology during : Mar 22, 2019 - Mar 23, 2019.
- Participated in FDP on Intellectual Property Rights And Art of Writing Funding Proposals And Journal Articles at Rajalakshmi Institute of Technology Chennai during Oct 05, 2018 - Oct 06, 2018.
- Participated in FDP on Artificial Intelligence and Machine Learning at UVCE, during Jul 24, 2019 - Jul 30, 2019.
- Participated in workshop on Digital Signal Processing Lab Description: Hands on training, held at Acharya Institute Of Technology during Jan 29, 2018 - Jan 31, 2018.
- Participated in training program conducted by Global Initiative Of Academic Network
- Description: Electric Vehicles and System Design held at BMSCE, during Jul 03, 2017 - Jul 13, 2017.
- Participated in training program conducted by Global Initiative Of Academic Networks: Advanced Adjustable Speed AC Motor Drive Systems Applications Problems And Solutions at NIT Goa, during May 15, 2017 - May 20, 2017.
- Participated in Texas Instruments University Program on IOT applications using TI CC3200 and Robotics held at Ahalia School of Engineering and Technology , Palakkad during Jul 17, 2018 - Jul 20, 2018.

- Attended training program on Soft Skill and Interview Competency Road Map to a Successful Career held at Siddaganga Institute of Technology during Jul 24, 2006 - Aug 06, 2006. · Attended national workshop on ARM CORTEX M4 programming held at National Institute of Technical Teachers Training and Research Chennai, during Oct 05, 2017 - Oct 07, 2017.
- Completed course on Dsp Algorithms, Architecture and Applications held at Indian Institute of Science, Bengaluru during Aug 05, 2017 - Dec 30, 2017.
- Attended FDP on IOT hands -on training held at RV Institute of Technology and Management during Dec 03, 2022 - Dec 04, 2022.
- Participated in One day Training on Interpersonal Skills held at RVCE on 10-11-2023. · Attended AI Tools workshop conducted on 13th August 2023, by be10X company. · Participated in 5 days NVIDIA AI&ML Training at RVCE , Bengaluru from 29/02/2024 to 06-03-2024. · Attended Workshop on Workshop on National Skill Development Program held on 4th March 2024 at BMSCE, Bangalore.
- Participated in Long Term Training Program on From TradAI to Gen AI: A Hands-on Transition to Generative World held at CMRIT, Bengaluru from 10th June to 15th June.
- Participated in FDP on Data Analytics and Visualization with PowerBI and Tableau from 9th-13th September 2024, organised by Dept. of ISE, CMRIT, Bangalore-560037
- Participated in 5 days FDP on SPARC-AI: Signal Processing, Automation and Real- Time Communication using AI in Electronics Design held at RVITM during 10th to 14th February 2025.
- Participated in Exclusive Visionary Forum Event on January 31st, 2025, at Centre of Excellence in Design(DCoE), Indian Institute of Science, Bengaluru.
- Attended the 5-Day Faculty Development Program on SPARC-AI: Signal Processing, Automation, and Real-Time Communication using AI in Electronics Design, organized by ECE, RVITM during AICTE's AI-Week from February 10 to February 14, 2025.
- Participated in the Yoga and Meditation Session conducted by Dr. Purushottam Bung (Director, RVIM) and Dr. Kokila, held from 28th July 2025 to 1st August 2025 at RVITM Campus.
- Participated in the SERB sponsored National Level Two days FDP on Emerging Trends In Mechanical Engineering: Bridging The Gap With Interdisciplinary Technologies on 25th & 26th September 2025.

ACCOMPLISHMENTS:

Awards

- **Best paper Award** in NCDTE-2024 at RVITM, Bengaluru for the paper titled " Dynamic Deep Learning Algorithm in Medical Diagnosis and Detection.
- **GATE-2016** qualified. (Enrolment ID: B323E29)
- **Awarded UGC merit fellowship in 2014** (for pursuing Doctoral Degree in Engg.).
- **Awarded UGC merit scholarship in 2011** (for pursuing Post Graduate degree in Professional Courses)

Invited Talks Organized

- Arranged Invited talk on " Empowering Entrepreneurs : Enhancing Employability in Modern Workplace" on 23rd May 2024 at RVITM , 1st floor seminar hall.
- Organized a technical talk on "Advancements in Computer Networks and Protocols" in association with the National Digital Library of India Club at RV Institute of Technology and Management, held on April 28, 2025, serving as Event Co-ordinator .
- Organized a technical talk on "Revolutionizing Automation with Instrument Transformers for Industry: Real World Use Cases and Challenges" at RV Institute of Technology and Management, held on December 18, 2025, serving as Event Coordinator . UG seminar hall.
- A invited talk titled “Securing the Digital Frontier: Deep Dive into Cybersecurity” was organized on 24 March 2026, featuring Mr. Chaitanya, Senior Systems Manager at Continental AG, as the resource person.
- A technical session titled “The AI Landscape: From Theory to Industry Practice” was organized on 24 March 2026, featuring Mr. Sai Sandeep Baba, Senior Manager and Global PMT Lead for R&D at Sensorics, Aumovio, as the resource person.

Invited Talk Delivered.

Resource person: NDLI CLUB , Technical Talk DELIVERED on “ Interpersonal Skills: Unlocking Your Inner Potential “ , Date : 21st February 2024 at 1st Floor Seminar Hall , RVITM, Bengaluru

Resource person: Delivered a technical seminar titled "*Artificial Intelligence in Motor Control*" as an invited speaker at REVA University, Bengaluru, organized by the School of Electrical and Electronics Engineering on April 24, 2025.

- **Question Paper Setting** -30 no. for VTU Autonomous Colleges
- **Taken active participation in preparing**
a)LabVIEW manual, b)Embedded C basics lab manual, c) EPC lab manual d)PCS lab manual

Subjects Thought:

Basic Electronics, Microcontroller, Power Electronics, Automotive Electronics, Signals and Systems, Network Analysis, DSP lab, Microcontroller Lab, Engineering Statistics and Linear Algebra, C and C++, Constitution of India and Professional Ethics, Management Studies, Cyber Security, Analog Electronics Circuits, Labview Lab, AEC lab, Embedded C Basics, IoT Lab, Introduction to Electrical Engineering, Robotics Lab, Electronic Principle Circuits, EPC lab, Electromagnetic Waves, CCN Lab, PCS Lab, ADSD Lab.

The Major Responsibilities:

1. Institution Level VTU Co-ordinator for Skill Development
2. Departmental Level Co-ordinator for AICTE Activity Points
3. Department Level CIE Co ordinator
3. Worked as Internship Coordinator for Final year UG students
3. Worked as Co-ordinator for Mini Project Work for Pre Final Year students
4. Worked as Chief Proctor at Dr.SSMCE

Membership in Committees:

- Session Chair for EASCT-2023 organized by RVITM , on 21-10-2023
- Information Committee Member in IC- RVITM 23 ,held on 28-29 Nov 2023.
- Technical Program Committee Member for ICC ROBINS 2024, organized by KPRIET, Coimbatore
- Doctoral Advisory Committee Member for Manipal Institute of Technology,Bengaluru
- Parents Relation Committee Member, RVITM
- Students Internship Monitoring Committee Member, RVITM
- Session Chair for EASCT-2023 organized by RVITM , on 22-10-2025

Reviewer for the following Journals/Conferences:

1. Journal of Intelligent and Robotic Systems , Springer Q1 Journal
2. ICIICS-2023, Sharnbasva Unviersity, Kalburgi, 24-25 Nov 2023
3. ICMNWC-2023, SSIT Tumkur during 04/05 Dec 2023.
4. IC-RVITM 23 during 28-29 Nov 2023.
5. EASCT-2023 organized by RVITM, Bengaluru
6. IEEE_ NMITCON 2024 organised by NMIT , 9th and 10th August 2024
7. IEEE ICDSNS , KIT TIPTUR, 26th and 27th July 2024.
8. 2nd International Conference on Networking, Embedded and Wireless Systems , BMSCE , Bengaluru
9. International Conference on Distributed Systems, Computer Networks, and Cyber security (ICDSCNC 2024) at Sri Krishna Institute of Technology, Bangalore
10. AIDE-2025, NMAMIT, Nitte, 06-07 February 2025.
11. Journal of Institute of Engineers - Series D, Scopus Indexed Q3 Journal
12. 2nd International Conference on Recent Advances in Information Technology for Sustainable development Manipal, India

Number of UG Projects Guided : 30

Hobbies: Making Friends, Reading, Mentoring Students, Gardening, Photography, Traveling, Listening Music, Meditation , Reading Spiritual Texts, Playing Cricket.

Social Responsibility / Community Engagement:

- Mentoring UG students in NSS activities, plantation and energy conservation drives.

References:

1. **Dr.E.G. Shivakumar** Ph.D.(IISc)
Professor(Retd.) and Guide,
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2. **Dr.H.R. Ramesh** Ph.D.(BUB)
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3. **Dr.Somala Arjuna Rao** Ph.D. (BUB)
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4. **Prof. Bhaskar Dutta Sharma** MBA(USA)
Principal Consultant and Director
Applied Management Skills and Practices
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Place: Bengaluru

Date: 01-03-2026

Dr. VENU GOPAL B.T.