# **FACULTY PROFILE**

# Dr. S.BHAVANI,

C/O Ch.Seshagiri rao,

Gudlavalleru.

E-Mail: sbge2025@gmail.com

-----



## **Academic Qualifications**

S. No.	Name of the Degree	University	Percentage of Marks/Grade	Specialization	Year of Pass
1	Ph.D.	Pondicherry University		Antenna Engineering	2023
2	M.Tech	J.N.T.U.K Kakinada	79	Digital Electronics and Communication Systems	2013
3	B.Tech	J.N.T.U.K Kakinada	77	Electronics and Communication Engineering	2009
4	Intermediate	Intermediate Board, A.P.	92.7	MPC	2005
5	S.S.C	Secondary School Education,A.P	86.6		2003

# **Professional Experience**

C No	Designation	Institution Name	Working Period	
S. No.	Designation	Institution Name	From	To
1	Assistant Professor	Gudlavalleru Engineering College, Gudlavalleru	20-05-2013	Till date

Professional Body Membership: IE (M-1814871), IAENG (501249)

**GATE Qualification:** Qualified in GATE-2014.

**UGC NET:** Qualified in December 2015

### Papers Published in Journals No. :

### SCI, ESCI & Web of Science Indexed Journals: 03

- 1. S. Bhavani, "Scarecrow shaped antenna optimization using Machine Learning Algorithms", Article DOI: 10.1002/dac.70028.
- 2. S. Bhavani and T. Shanmuganantham, "Analysis of tumor in the breast using UWB textile antenna", Microwave and Optical Technology Letters, Vol.64, 1765-1772, October 2022, DOI: 10.1002/mop.33336.
- 3. S. Bhavani and T. Shanmuganantham, "Wide band fabric antenna for Ultra wideband Applications using for medical applications", Defence Science Journal, Vol. 72, No. 6, pp. 864-872, November 2022, DOI: 10.14429/dsj.72.17919.

### **Scopus Indexed Journals: 04**

- 1. S. Bhavani and T. Shanmuganantham, "Low Profile Textile Flower Shaped Antenna for Ultra Wideband Applications", Progress In Electromagnetics Research C, Vol. 126, 91-103, November, 2022.
- 2. S. Bhavani and T. Shanmuganantham, "Ultra-Wideband Textile Antenna for WBAN and Health Care Systems", International Journal of Microwave and Optical Technology, VOL.17, NO.5, 542-550, September 2022.
- 3. S. Bhavani and T. Shanmuganantham," Analysis of Different Substrate Material on Wearable Antenna for ISM Band Applications", Advances in Communication Systems and Networks, Lecture Notes in Electrical Engineering 656, pp 753-762, © Springer Nature Singapore Pte Ltd. 2020.
- 4. S.Bhavani, Firdous "Secure Data Transmission through RDH", International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol. 7, No. 6 (2014), pp. 261-272.

### **UGC Indexed and other Journals: 09**

- 1. S. Bhavani and T. Shanmuganantham, "Textile UWB Antennas for Biomedical Applications", IRO Journal on Sustainable Wireless Systems, Vol. 4, 173-184, September, 2022.
- 2. Priyadarshini.V, V. Sreelakshmi, S.Bhavani, "Design and Analysis of Approximate Multipliers, International Journal of Review in Electronics Communication Engineering(IJRECE), VOL. 6 ISSUE 4 (OCTOBER- DECEMBER 2018) ISSN: 2393-9028 (PRINT) [ISSN: 2348-2281 (ONLINE), December 2018 [impact factor: 4.305].

- 3. L.Vedakumar, S.Bhavani, "Audio watermarking for digital image protection using source-channel coding", IJARCCE, Vol.5, September 2016.
- 4. Ramya.P, Bhavani S, Priyadarshini.V, "An Improved Energy Efficient and Certificate Revocation Technique for Mobile Ad Hoc Networks", IEEE sponsored 4<sup>th</sup> International Conference on Communications, Signal Processing, Computing and Information Technologies (ICCSPCIT-2015), MRCET, December 18-19, 2015.
- 5. S.Bhavani, B.Raviteja, "Noise Estimation based on Entropy without using VAD for Speech Enhancement", International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol.7, No.2 (2014), pp.355-364.
- 6. S.Bhavani, B.Raviteja "Reverse Data Hiding for Security Applications", International Journal of Computer application, Volume 106 No. 14, November 2014.
- 7. S.Bhavani, B.Raviteja "Compending of Reverse and Data Hiding", International Journal of Computer Science and Information Technology, Vol. 5 (6), 2014, 7496-7500.
- 8. S. Bhavani, "A Compact G-Shaped Four Elements MIMO Antenna For 5G", IJNRD International Journal Of Novel Research And Development, ISSN:2456-4184, Vol.9, Issue 4, page no. b488-b496, April-2024.
- 9. S. Bhavani, "Scare Crow Shaped Antenna for C Band Applications", IJNRD International Journal Of Novel Research And Development, ISSN:2456-4184, Vol.9, Issue 4, page no. b497-b507, April-2024.

## Papers Presented in Conferences No.: 10

- 1. S.Bhavani and T.Shanmuganantham, "Periwinkle shaped patch Antenna for UWB applications", SSRN ELSVIER- International Conference on Emerging trends in Science, Engineering and Technology (ICESET-2023), ANDHRA LOYOLA COLLEGE, Vijayawada, February, 2023.
- 2. S.Bhavani and T.Shanmuganantham, "Strawberry shaped patch Antenna for Biomedical applications", SSRN ELSVIER- International Conference on Emerging trends in Science, Engineering and Technology (ICESET-2023), ANDHRA LOYOLA COLLEGE, Vijayawada, February, 2023.
- 3. S.Bhavani and T.Shanmuganantham, "Compact New UWB Textile Antenna For Medical Applications", Third International Conference on Innovation in Science and Technology for Sustainable Development, College of Engineering, Perumon, sponsored by TEQIP-II and technically co-sponsored by IEEE Kerala section, August 2022.
- 4. S.Bhavani and T.Shanmuganantham, "Textile UWB Antennas for Biomedical Applications", 1ST International Conference on Electronics and Telecommunication for Real Time Applications (IETRTA 2022), August 2022.
- 5. S.Bhavani and T.Shanmuganantham, "Wearable Antenna for Bio Medical Applications", 2022 IEEE Delhi Section Conference (DELCON), February 2022, DOI: 10.1109/DELCON54057.2022.9753038.
- 6. S.Bhavani and T.Shanmuganantham, "Wearable Microstrip Circular Patch Antenna for Breast Cancer Detection", IEEE International Symposium on Antennas and Propagation

- and USNC-URSI Radio Science Meeting held on 4-10 December 2021 at Marina Bay Sands, Singapore.
- 7. S.Bhavani and T.Shanmuganantham, "Ultra wideband Antenna for Early Breast Cancer Detection", Virtual Conference on Smart Computing & Advanced Communication, PSNA College of Engineering & Technology, Dindigul, 30-31 March, 2021. (SCOPUS)
- 8. S.Bhavani and T.Shanmuganantham, "Analysis of Different Substrate Material on Wearable Antenna for ISM band applications", International Conference on Communication Systems and Networks (ComNet2019), Organized by Department of ECE, Mar Baselios College of Engineering & Technology, Nalanchira, Trivandrum in association with University of Dayton, Ohio, and ISRO, Springer, December 12-13, 2019.
- 9. Ramya.P, Bhavani S, Priyadarshini.V, "An Improved Energy Efficient and Certificate Revocation Technique for Mobile Ad Hoc Networks", IEEE sponspored 4<sup>th</sup> International Conference on Communications, Signal Processing, Computing and Information Technologies (ICCSPCIT-2015), MRCET, December 18-19, 2015.
- 10. S.Bhavani, "Speech Enhancement Using Eigen Values", International Conference on Electronics, Communications and Information Systems, Kalasalingam University, Madurai, Nov2-3, 2013.

### **Virtual Labs:**

• Involved in development of the web-enabled experiments of optical communication lab in association with IIT-Roorkee.

### **NPTEL CERTIFICATIONS: 08**

- 1. Successfully Completed NPTEL certification course on "Microwave Integrated Circuits" an 8 week course from Jan-Mar2021 (Elite Silver).
- 2. Successfully Completed NPTEL certification course on "Introduction to Research" an 8 week course from Sep-Nov2020.
- 3. Successfully Completed NPTEL certification course on "Microwave Theory and Techniques" a 12 week course from Sep-Dec2020.
- 4. Successfully Completed NPTEL certification course on "Antennas" a 12 week course from Jan-April 2020 (Elite Silver).
- 5. Successfully Completed NPTEL certification course on "Digital Circuits" a 12 week course from July-November 2019 (top2%).
- 6. Successfully Completed NPTEL certification courses on "Electronic Modules for Industrial Applications using op-amp", a 8week course from Feb-April 2019 (topper).
- 7. Successfully Completed NPTEL certification course on "Analog Circuits", an 8week course from Jan-March 2019 (Elite Silver).
- 8. Successfully Completed NPTEL certification course on "Integrated Circuits, MOSFETs, OP-Amps and their Applications", a 12 week course from Jan-Apr 2018.

### **eDX** Certifications:

- 1. Deep Learning with Tensorflow
- 2. Deep Learning Fundamentals with Keras
- 3. Deep Learning with Python and PyTorch
- 4. PyTorch Basics for Machine Learning
- 5. Applied Deep Learning Capstone Project
- 6. Machine Learning with Python: A Practical Introduction
- 7. Python Programming: Basic Skills
- 8. Python Programming: Intermediate Concepts
- 9. Python Programming: Object-Oriented Design

### **Udemy Courses (Running):**

- 1. TensorFlow for Deep Learning Bootcamp
- 2. PCB Design in Cadence OrCAD/Allegro: Basics to Expert level
- 3. 100 Days of Code: The Complete Python Pro Bootcamp

## **Udemy Courses (Completed):**

1. CST Antenna Design with zero to hero

## **Subjects Handled**

#### **Under Graduation**

- Optical Communications
- Control Systems
- Microwave Devices and Circuits
- Antenna and Wave Propagation
- Linear and Digital IC Applications
- Pulse and Integrated Circuits
- Microwave and Optical Communications
- Digital Image Processing

#### **Post Graduation**

• Image & Video Processing

### Labs Handled

#### **Under Graduation**

- Digital Communications
- Microprocessor and Microcontroller
- IC Applications
- Basic electrical and Electronics
- Electronic Devices and Circuits
- Electrical & Electronics Workshop
- IC&PDC
- Microwave Engineering
- RF & OC
- Python Programming
- IT Workshop

## **Projects Guided**

Under Graduation -- 11

Post Graduation -- 02

## **Curriculum Design and Development**

- Control Systems
- Image and Video Processing
- Developed virtual lab "Optical Communications" to IIT Roorkee
- Subjects: LICA, LICA Lab, RF&OC lab for R20 Curriculum

#### **Additional Activities:**

- Working as ECE Dept. Coordinator for NBA-CR-1
- Working as Discipline committee member
- Class teacher
- o M.Tech Exam coordinator
- o Project coordinator
- o NPTEL Faculty coordinator

# Workshops /Conferences /Seminars Attended No.: 10

- 1. Participated in one day workshop on "Women in Antenna Engineering" organized by Pondicherry University, on <sup>7th</sup> March 2020.
- 2. Participated in 2 day national workshop on "Digital Signal Processors Architectures and Optimization Methodologies" organized by Dept of ECE at DVR & Dr. HS MIC College of Technology, Kanchikacherla, on 23<sup>rd</sup> & 25<sup>th</sup> September 2017.
- 3. Participated in 2 day national workshop on "Research Methodologies" organized by Dept of ECE at Ramachandra College of Engineering, Eluru, on 3<sup>rd</sup> & 4<sup>th</sup> February 2017.

- 4. Participated in 2 day national convention on "Recent Advances in Microwave, Antennas and Communications" organized by Dept of ECE in association with IE at P.V.P ,Vijayawada from 01-07-2016 to 02-07-2016.
- 5. One day Workshop on "Research in Energy Management Wireless Networks and Smart Transportation Systems" organized by the Institute of Engineers (IE), INDIA, Vijayawada local Center, Vijayawada on 29<sup>th</sup> March 2015.
- 6. One day workshop on "Ultra Low Power Communication Using CC430 Microcontroller Hands on Experience", organized by the Department of Electronics and communication Engineering, Gudlavalleru Engineering College, Gudlavalleru on 09<sup>th</sup> February 2015.
- 7. One day workshop on "Speech Processing: Current Challenges and Hands-on Experience", organized by Signal Processing and Communication Research Group, Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru on 23<sup>rd</sup> August 2014.
- 8. Three day National Workshop on "Theory & Applications of Intelligent Signal Processing", organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 28<sup>th</sup> February to 2<sup>nd</sup> March 2014.
- 9. Two day workshop on "Issues in Integrated Circuits (ICs) Design" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 13<sup>th</sup> 14<sup>th</sup> December 2013.
- 10. One week faculty refresher course on "Electronic Devices and Circuits" organized by department of ECE, Gudlavalleru Engineering College, Gudlavalleru during  $23^{rd} 28^{th}$  September 2013.

## Certifications/Training Programs Attended No.: 15

- 1. Successfully completed 3-day master class conducted by Iron lady on 16-06-2021.
- 2. Participated in AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" (Decentralized Network Synchronization) Phase-II organized by Department of Electronics and Communication Engineering from 17-08-2020 to 22-08-2020.
- 3. One week faculty development program on "Data Acquisition and RT using LabVIEW" organized by Dept of ECE in association with National Instruments, Bangalore, from 25<sup>th</sup> -30<sup>th</sup> February 2019.
- 4. Attended the Three Day training programme on "Advanced Development Tools Based IOT" organized by Department of ECE, Gudlavalleru Engineering College, Gudlavalleru from 11<sup>th</sup>-13<sup>th</sup> November 2019.
- 5. One week faculty development program on "Signal And Image Processing Using LABVIEW" organized by Dept of ECE in association with E&ICT Academy, NIT Warangal, from 4th -9th February 2019.
- 6. Participated in the one week national level Faculty Development Program (FDP) on "Signal & Image Processing using LABVIEW" organized by Department of Electronics

- and Communication Engineering in association with NI systems Pvt.Ltd., Gudlavalleru Engineering College, Gudlavalleru on 13<sup>th</sup>-18<sup>th</sup> November 2017.
- 7. Two day staff training program on" MATLAB Tools For Engineers- Hands on experience" conducted by NIT Warangal in association with Dept of ECE, GEC during 10<sup>th</sup>-11<sup>th</sup> January 2017.
- 8. Participated in the Faculty Development Program (FDP) on Hands on experience in ital Signal Processing Applications" conducted by NIT Warangal in association with Dept of ECE, GEC during 07<sup>th</sup> -12<sup>th</sup> November 2016.
- 9. Two day staff training program on "Simulation of Linear & Digital Integrated Circuits and Microcontroller based Applications" using NI Multisim organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru on 4<sup>th</sup>-6<sup>th</sup> November 2016.
- 10. Participated in the Faculty Development Program (FDP) on "Hands-on-training on MATLAB for Digital Signal Processing (HAMDSP)" conducted by Dept of ECE,VJIT during 22<sup>nd</sup>-27<sup>th</sup> February 2016.
- 11. Participated in the Faculty Development Program (FDP) on "Development of Wireless Sensor Networks using Network Simulator (NS2)-Hands on Experience "organized by Communication Research Group in association with Vertex Soft, Hyderabad, and 1<sup>st</sup> -5<sup>th</sup> Dec 2015.
- 12. Attended a one week Refresher course on "Microprocessors and Micro Controllers" held during 17<sup>th</sup> -21<sup>st</sup> November 2015, at Gudlavalleru Engineering College organized by Research and Development Centre, Department of ECE.
- 13. Two week ISTE workshop on "Signals & Systems" conducted by IIT Kharagpur in association with department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 2<sup>nd</sup> -12<sup>th</sup> January 2014 (This workshop was held under the national mission on education through ICT (MHRD)).
- 14. One week ISTE workshop on "Analog Electronics" conducted by IIT Kharagpur in association with department of ECE, Gudlavalleru Engineering College, Gudlavalleru during 4<sup>th</sup> -14<sup>th</sup> June 2013 (This workshop was held under the national mission on education through ICT (MHRD)).
- 15. One week training program on "Training Teachers for Excellence", organized by Gudlavalleru Engineering College, Gudlavalleru during 17<sup>th</sup>- 21<sup>st</sup> June 2013,conducted by Dr.B.G.Barki, Former Director, NITTTR, Chennai.

#### Online FDP/Webinars Attended: 35

1. Attended Seven Week online training program on VLSI Design Flow (RTL to GDS-II) at Centre of Excellence in Chip Design, NIELIT, Ministry of Electronics and Information Technology, Noida from 14/10/2024 to 29/11/2024.

- 2. Participated in online workshop on "VLSI to System Design: Silicon to End Application Approach" organized by All India Council for Technical Education (AICTE), Arm Education and STMicroelectronics during 31<sup>st</sup> July 4<sup>th</sup> August 2023.
- 3. Attended One Week Online Workshop on "Design and Analysis of Advanced Antenna Systems" organized by IEEE MTT-S Vardhaman Student Chapter, Department of Electronics and Communication Engineering, at Vardhaman College of Engineering, Hyderabad during 23-28 August 2021.
- 4. Participated in AICTE-ISTE sponsored One week online Induction Induction Programme Programme on "Millimeter Millimeter Wave Frequencies" Frequencies" (PHASE II) organised by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College during 16 22 March 2021.
- 5. Participated in a two-week Online Faculty Development Programme on "Advanced Communication and Antennas" jointly organized by Electronics and ICT Academies held from 15 26 Feb, 2021 under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" of the Ministry of Electronics and Information Technology (MeitY), Government of India.
- 6. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 2020-12-7 to 2020-12-11 at Gudlavalleru Engineering College.
- 7. Participated in AICTE-ISTE sponsored sponsored One week online Induction Programme on "Millimeter Wave Frequencies" organised by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College during 16 21 November 2020.
- 8. Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Flexible and Wearable Antennas: Recent Advancements, Fabrication Techniques and Applications" from 2020-10-12 to 2020-10-16 at National Institute of Technical Teachers Training and Research.
- 9. Attended Online Three Day Higher Education Conclave, organized by IEEE Guntur Sub Section in collaboration with IEEE Education Society Chapter, Hyderabad Section during October 15th-17th, 2020.

- 10. Successfully completed ATAL online FDP on "Wearable Devices" from 14-09-2020 to 18-9-2020 at kongu engineering college.
- 11. Participated in AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" (Decentralized Network Synchronization) Phase-II organized by Department of Electronics and Communication Engineering from 17-08-2020 to 22-08-2020.
- 12. Attended a AICTE Sponsored STTP conducted by Gudlavalleru Engineering College on "Blockchain Architecture Design and Use Cases" held during 10th to 15th August 2020.
- 13. Attended a webinar conducted by Gudlavalleru Engineering College on "Intellectual Property Rights & Patents A View" held during 10th to 12th August 2020.
- 14. Participated in one week refresher course on "Embedded System Design" organized by Dept of ECE, GEC, from 27th July to 1st August, 2020.
- 15. Participated in one week online workshop on" Recent Trends & Research Scope in Antenna Domain" conducted by Vignan's Institute of Technology, during 27th to 31st July,2020.
- 16. Actively participated in the International Webinar on "The study of End of life vehicles— The mode of Sustainable Development", conducted by University of College of Engineering kariovattam on 25th July 2020
- 17. Actively participated in the International Webinar on "Bio Medical Instrumentation: past, present & future", conducted by University of College of Engineering kariovattam on 24th July 2020
- 18. Actively participated in the International Webinar on "Digital transformation: Transforming the new Era", conducted by University of College of Engineering kariovattam on 24th July 2020
- 19. Actively participated in the International Webinar on "3D printing: Trends & Opportunities", conducted by University of College of Engineering kariovattam on 23rd July 2020
- 20. Actively participated in the International Webinar on "Cognitive Radios: How to be catapulted towards 5G and beyond", conducted by University of College of Engineering kariovattam on 23rd July 2020
- 21. Actively participated in the International Webinar on "Technology & Innovation 2020", conducted by University of College of Engineering kariovattam on 22nd July 2020

- 22. Participated in one week online faculty Development Program on "Blended E-Learning", organized by Dept of CSE, JNTUK college of engineering, Vizayanagaram, from 6th July to 10th July, 2020.
- 23. Participated in the one week National level online FDP on "Research Challenges and Emerging trends in ECE", organized by dept of ECE, Ramachandra college of Engineering, from 27th May to 1st June 2020.
- 24. Participated in Five Days online faculty Development Program on "Recent Communication Tools & ITS Applications", organized by Dept of ECE, St. Martin's Engineering College, from 19th May to 23rd May, 2020.
- 25. Attended a oneweek International online Knowledge development program conducted by Gudlavalleru Engineering College on "Challenges and Advancements in the design of IOT, Embedded and VLSI systems: A Researchers View"held during8th to 13th June 2020.
- 26. Actively participated in online FDP on MATLAB & Simulink in Engineering Education organized by APSSDC from 10-06-2020 to 11-06-2020.
- 27. Participated in the 3 day International online FDP on "Technologies for Health" organized by Dept of ECE,GMR Institute of Technology ,AP, during 8th to 10th June,2020.
- 28. Participated in one week online faculty Development Program on "Role of Teachers in Quality Enhancement & Accreditation", organized by Dept of ECE, Santhiram Engineering College, from 5th June to 11th June, 2020.
- 29. Participated in the International webinar on "Research Proposal Writing" in association with IEEE CMRTC Student batch, CMR Technical campus, Hyderabad on 9th June 2020.
- 30. Attended a webinar conducted by Gudlavalleru Engineering College on "Impact of Covid in Engineering Education & Way forward" on 9th June 2020.
- 31. Participated in one week national level online FDP on "Recent trends in Communication & Wireless Networks", organized by Dept of ECE, Kits, from 05-06-2020 to 09-06-2020.
- 32. Participated in the webinar on "Writing an effective Research paper-Means and methods organized by Dept of CSE, CMR engineering college on 29th May 2020.

- 33. Attended a webinar conducted by Gudlavalleru Engineering College on "Radio Frequency Measurements for Cellular and Wireless Communication Systems" on 25th May 2020.
- 34. Successfully attended the IT live webinar on "HOW TO PREPARE A GOOD RESEARCH GRANT PROPOSAL?" Conducted by PSNA college of Engineering & Technology on May 20, 2020.
- 35. Participated in the 2 day online FDP on "Microstrip Antennas for Advanced Wireless Communications" organized by Dept of ECE, KALLAM HARINATH REDDY INSTITUTE OF TECHNOLOGY in association with IETE, FROM 15th to 16th May, 2020.
- 36. Participated in one week online faculty Development Program on "Advanced Antenna Design Using HFSS", organized by Dept of ECE, Santhiram Engineering College, from 12th May to 15th May, 2020.

### **Declaration**

I, hereby declare that all the above-furnished information is correct to the best of my knowledge.

Date: 5/02/2025 Signature

Place: Gudlavalleru (S.Bhavani)