

Name: V. A. Velvizhi				
Designation:	Associate Professor			
Qualification:	M.E., (PhD)			
Area of specialization:	Communication Systems			
Date of Joining	16. 06. 2008			
Experience : (As on Dec 2025)	Industrial Experience		Teaching Experience	
	NIL		22 years 2 Months	
Number of workshop / FDP attended:	Number of Workshops		Number of FDPs	
	10		30	
Publications:	Conference		Journal	
	National	International	National	International
	7	11	NIL	22
Patents:	National		International	
	NIL		5	
Professional Body Membership:	IETE, IAENG, ISTE, IEEE			

**Staff
Achievements
:**

1. Secured 100 % result in handling subjects.
2. Co – Coordinated and participated in ‘Biomedical Electronics and Biomedical Informatics’ (NCBEBI - 200), in DRDO & IETE sponsored National Conference conducted by the Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 44, 5th and 6th February 2009.
3. 2. Acted as Coordinator, Anna University approved faculty development training programme on EC6702 – Optical Communication and Networking”, Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 600 044, 31st May to 7th June, 2017.
4. Delivered a lecture on “PRE-PROCESSING TECHNIQUES IN CONTEXT TO SIGNAL PROCESSING TECHNIQUES”, at the short course on “Signal processing. Image processing and Deep learning techniques for the development of intelligent health care systems”, at the International Conference on “International Conference on Communication, Computing and Internet of things - IC³IOT 2018, conducted by the department of ECE, Sri Sai Ram Engineering College, Chennai 600 044.
5. Coordinated one-day hands-on workshop on " Developing and Deploying machine learning and deep learning algorithms using MATLAB & Simulink" on Saturday, 3rd August 2019.
6. Co-ordinated a three-day Faculty Development Programme on "Get Ready for AI with MATLAB and SIMULINK" from 18.06.2020 - 20.06.2020.
7. Co-ordinated the National level Tech fest, “Zenista TechFest 2020”, on 8th October, 2020.
8. Coordinated online Alumni Meet - 12th Jan 2022
9. Acted as Session Chair in the ICPECTS 2022 conference.
10. Completed the certificate course on Digital Teaching Techniques under R Systems Women Educators Empowerment Program held from 2nd February 2023 to 17th February 2023.
11. Acted as Reviewer for the 5th International Conference on Computing and Communication Technologies (ICCCT’25)
12. Participated in the 6-day FDP on ‘Emerging Trends in Artificial Intelligence(AI): Innovations and Applications’, held from 16.12.2024 to 21.12.2024.
13. Completed 5-day online FDP on “Inculcating Universal Human Values in Technical Education’, organized by AICTE from 6th

June to 10th June 2022

14. Completed 6-day online UHV-II FDP organized by AICTE from 13th February to 18th February 2023.

15. Completed FDP on Virtual Labs, held virtually as a part of PALS VLABS 2023 - 23 Initiative with NITK Surathkal.

Workshop Details:

1. Attended Workshop on ‘Computer Networking’, organized by Department of Electronics and Communication Engineering, College of Engineering, Guindy, Anna University, Chennai 25, on 14.10.2006
2. Attended ‘National Workshop on MATLAB and its Applications’, Department of Electronics and Communication Engineering, SSN College of Engineering, Chennai, 603 110, 7th to 11th MAY 2007.
3. Attended ‘VLSI Design Methodologies and Tools’, Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, 7th and 8th October, 2010.
4. Attended National Workshop on ‘Wireless Communication and Radiating Systems’, Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, 21st and 22nd March, 2011
5. Attended DRDO-sponsored workshop on ‘Recent Trends in Antennas for Multifield Applications’, Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, 27th and 28th December, 2012
6. Attended Workshop on ‘Artificial Intelligence and Cognition’, Department of Electronics and Communication Engineering, Panimalar Institute of Technology, Chennai 600 123, 4th & 5th November 2015
7. Attended 2nd Workshop on ‘Emerging Trends and future perspective in image processing and computer vision’, Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 600 044, 4th to 6th January, 2017
8. Attended 3rd Workshop on ‘Emerging Trends and future perspective in image processing and computer vision’, Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 600 044, 3rd to 5th January, 2018

9. Attended International Workshop on 'Applications of Data Science', The Department of Electronics and Communication Engineering, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu, India, 29.6.2020 & 30.6.2020
10. Attended two-day International workshop 'Deep learning Models and its Applications', The Department of Electronics and Communication Engineering, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu, India, 8.12.2020 & 9.12.2020

FDP Details:

1. Attended 'Signals and Systems', Anna University approved course at SSN College of Engineering, Chennai, 603 110, 21st to 26th November 2005
2. Attended 'Instructional Design and Delivery', AICTE-sponsored staff development programme on Department of Computer Science and Engineering, Sri Sai Ram Engineering College, 8th and 9th January 2009
3. Attended 'EC2302 - Digital Signal Processing', Anna University approved faculty development training programme at Department of Electronics and Communication Engineering, Jeppiaar Engineering College, Chennai, 9th to 16th June 2010
4. Attended 'ISO 9001: 2008 Quality Management System and Audit Training, Creative Management Consultants', at Sri Sai Ram Engineering College, 11th and 12th October, 2011
5. Attended Internal Faculty training program on 'PYTHON PROGRAMMING', Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 600 044, 30th October to 6th November, 2017
6. Attended Faculty Development Training Program on 'Digital Communication', Department of Electronics and Communication Engineering, SSN College of Engineering, Chennai - 603 110, 11th to 17th June, 2018
7. Attended FDP Certification Course on 'Outcome Based Pedagogic Principles for Effective Teaching NPTEL Online Certification Course – June 2018 session', Four Week Course

8. Attended two weeks Faculty Development Programme on 'RESEARCH METHODOLOGY' from October 01- October 15, 2020, and obtained a grade A+, Teaching Learning Centre, Ramanujan College, University of Delhi under the MINISTRY OF HUMAN RESOURCE DEVELOPMENT, PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING, October 01- October 15, 2020
9. AICTE Training and Learning (ATAL) Academy Online FDP on 'Artificial Intelligence', ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070 - KIIT Deemed to be University, 2020-10-15 to 2020-10-19.
10. AICTE Training and Learning (ATAL) Academy Online FDP on 'Electrical & Computer Engineering', ALL INDIA COUNCIL FOR TECHNICAL EDUCATION, Nelson Mandela Marg, Vasant Kunj, New Delhi – 110 070 - Indian Institute of Information Technology Kottayam. 2020-11-4 to 2020-11-8.
11. Three-day Faculty Development Programme on Augmented Reality and Virtual Reality between 27.5.2020 and 29.5.2022.
12. Faculty Development Program, Teaching technical computing through interactive methods using MATLAB and Simulink (Online Live FDP) conducted by ICT Academy on 30 Jul 2020 to 31 Jul 2020.
13. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Research Confront and Document Preparation Using Latex" from 2021-08-02 to 2021-08-06 at National Institute of Technology Kurukshetra.
14. Faculty Development Programme on "Creative and Innovative Teaching Strategies for the New Normal" organized by the Institution's Innovation Council of Sri Sivasubramaniya Nadar College of Engineering during May 24-31, 2021.
15. Completed modules 1,2,3,5,6,7 of NITTTR.
16. Silver medal in FDP Certification Course on 'Introduction to soft computing', NPTEL Online Certification Course –Jan - March 2021 session, Eight Week Course
17. Completed 12-week course on 'Fundamentals of Artificial Intelligence', online certification course, July - October 2023.
18. Completed 12-week course on 'Data Analytics with Python', online certification course, January - April, 2024.

19. Completed 12-week course on 'Principles of Communication Systems - I', online certification course, January - April, 2024.
20. Completed 12-week course on 'Principles of Signals and Systems', online certification course, January - April, 2024.
21. Completed 12-week course on 'Deep Learning', online certification course, July - October, 2024.
22. Completed 8-week course on 'Introduction to Machine Learning', online certification course, July - September, 2024.
23. Completed 12-week course on 'Learning Analytics Tools', online certification course, July - September, 2024.
24. Completed 12-week course on 'Machine Learning and Deep Learning - Fundamentals and Applications', online certification course, July - October, 2024.
25. Completed 12-week course on 'Communication Networks', online certification course, January - April, 2025.
26. Completed 8-week course on 'Ethics in Engineering Practice', online certification course, February - April, 2025.
27. Completed 12-week course on 'Natural Language Processing', online certification course, January - April, 2025.
28. Completed 12-week course on 'NBA Accreditation and Teaching and Learning in Engineering (NATE)', online certification course, January - April, 2025.
29. Completed 12-week course on 'Signal Processing Techniques and its Applications', online certification course, January - April, 2025.
30. Completed 4-week course on 'Teaching and Learning in Engineering (TALE)', online certification course, January - February, 2025.
31. Completed 12 week FDP course on Simulation of Communication Systems using Matlab - Online certification course , July-October, 2025
32. Completed 4 week FDP course on Patent Drafting for Beginners - Online certification course , July-August, 2025

Conference Details:

1. Participated and presented a paper titled 'Integer wavelet transform based signal coding', in the IEEE All India students' congress, IEEE Student Branch (29861), at Mepco Schlenk Engineering College. Sivakasi, 6th February 2004
2. Participated and presented a paper titled 'Basic lifting scheme wavelets', in the National Conference on Wireless Communication conducted by St. Joseph's Engineering College, Chennai, 9th February 2004

3. Participated in a tutorial session on 'Wireless Sensor Networks', AICTE-sponsored International Conference on Innovative Computing, Information and Communication Technology (ICICT'09'09) held at Sri Sai Ram Engineering College, Chennai – 44, 16th to 18th December, 2009
4. Participated and presented a paper titled 'Urban And Rural Drinking Water Sanitation Using Low Power Consuming Wireless Sensor Networks', in the National Conference on "Innovations in Intelligence and Computing Technologies (NCIICT 2013)" conducted by the Department of Computer Science and Engineering, Easwari Engineering College, Chennai – 89, 12th March 2013
5. Participated and presented a paper titled 'Urban and rural drinking water sanitation and distribution using low power consuming wireless sensor networks', in the International Conference on "Computation of Power, Energy, Information and Communication (ICCPEIC - 2013)" conducted by the Department of Electrical and Electronics Engineering, Adhiparasakthi Engineering College, Melmaruvathur, 603 319, 17th and 18th March 2013
6. Participated in the National Conference on 'Advanced Communication and Computing Techniques (NCACCT – 13)', conducted by the Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 44, 18th and 19th March 2013
7. Participated and presented a paper titled 'Optimal subsink selection for novel data collection using Wireless Sensor Networks', in the third International Conference on "Soft Computing and Advanced Communication Systems (SACS'14)", 21st March 2014
8. Participated in the National Conference "Advanced Communication and Computing Techniques (NCACCT – 14)", conducted by the Department of Electronics and Communication Engineering, Sri Sai Ram Engineering College, Chennai 44, 11th April 2014
9. Participated and presented a paper titled 'Genetic algorithm based data collection method in wireless sensor network', in the National Conference on "Modern Electronics and Signal Processing (NCMESP'15)" conducted by the Department of Electronics and Communication Engineering, Velammal Engineering College, 13th March 2015

10. Participated and presented a paper titled 'Immersive difficult terrain based on virtual reality', in the International Conference on Modern Signal Processing, Communication and Computational Research (ICSPCCR - 16) conducted by the Department of Electronics and Communication Engineering & Institute of Engineering Research & Publication (IFERP), Vidya Vikas Institute of Engineering and Technology, Mysuru, 570 028, 18th & 19th May, 2016
11. Participated and presented a paper titled 'Microwave 3D antennator brain tumor sensing analysis system', in the International Conference on Recent Research in Engineering 2017 (ICRRE 2017), SKR Engineering College, 31st March 2017.

Journal Details:

1. Published a paper titled 'Efficient data collection in WSN using optimal subsink selection', in International Journal of "Advanced and Innovative Research", ISSN: 2278 – 7844, published on IJAIR, Volume 3, Issue 1, January 2014
2. Published a paper titled 'Inclination Based Fall Detection System', in International Journal of Research and Analytical Reviews (IJRAR) www.ijrar.org, P- ISSN 2349-5138, 2019 IJAR July 2019, Volume 6, Issue.
3. Published a paper titled 'Design and Implementation of Smart System for Interaction Between Blind, Deaf and Mute People', in International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8, Issue-2S11, September 2019.
4. Velvizhi, V. A., & Priya, E. (2020, November). A preprocessing technique for seismocardiogram signals in removing artifacts. In *International Conference on Futuristic Communication and Network Technologies* (pp. 845-853). Singapore: Springer Nature Singapore
5. Velvizhi, V. A., Senbagavalli, G., & Anbarasan, M. (2021, December). Communication Between Two Vehicles Using LoRa. In *2021 4th International Conference on Computing and Communications Technologies (ICCCT)* (pp. 453-457). IEEE
6. Gunaseelan, N. G., Anbarasan, M., & VA, V. (2022, March). Design of microwave 3-D antenna for brain tumour sensing system. In *2022 International Conference on Communication, Computing and Internet of Things (IC3IoT)* (pp. 1-4). IEEE.

7. Bharathipriya, C., Manigandan, M. D., Sudha, G., Velvizhi, V. A., Prakash, J., Kadambarajan, & Sasikala, V. (2022, September). EEG based epileptic seizure detection methods. In *AIP Conference Proceedings* (Vol. 2518, No. 1, p. 040001). AIP Publishing LLC.
8. Velvizhi, V. A., Anbarasan, M., Gayathri, S., Jeyapiriya, K., & Rajesh, S. (2022). IoT-Based ECG and PCG Monitoring Systems. In *Emerging Technologies in Data Mining and Information Security: Proceedings of IEMIS 2022, Volume 3* (pp. 243-251). Singapore: Springer Nature Singapore.
9. Gayathri, S., Lakshmi, S. S., Soundharya, R., Ashwini, R. G., Sudha, G., Velvizhi, V. A., & Geetha, R. APPLICATIONS OF AI IN AUTONOMOUS SURVEILLANCE ROBOTIC SYSTEM
10. ROBOTIC AGRICULTURE FIELD MONITORING AND PEST CONTROL SYSTEM, SL 1V.A.Velvizhi, 2G.Jayavarshini, 3Swarnamala S, INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS 10 (2), 122-127
11. Gayathri, S., Lakshmi, S. S., Soundharya, R., Ashwini, R. G., Sudha, G., Velvizhi, V. A., & Geetha, R. APPLICATIONS OF AI IN AUTONOMOUS SURVEILLANCE ROBOTIC SYSTEM
12. Anitha, R., Priyadharshini, B., Kiruthika, A., Velvizhi, V. A., & Lalitha, K. (2023, December). Design and Development of IoT Camera with CHATBOT for Domestic Surveillance. In *2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)* (pp. 1-5). IEEE
13. Velvizhi, V. A., Manish, M., Srinivas, P. S., & Richard, S. S. (2023, December). Automata Bin. In *2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)* (pp. 1-4). IEEE
14. Velvizhi, V. A., Anbarasan, M., Gayathri, S., Vaseekaran, K. V., Sanjai, A., & Gokul, S. (2024, April). Noval Railway Track Crack Detection System. In *2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)* (pp. 1-4). IEEE.
15. Velvizhi, V. A., Anbarasan, M., Gayathri, S., Boomiga, S., & Subiksha, S. (2024, April). Leveraging IoT Technology for Disaster Management and Emergency. In *2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)* (pp. 1-4). IEEE.
16. Velvizhi, V. A., Anbarasan, M., & Pradeep, N. S. (2024, October). Development and Integration of a Dual-Mode Drone-Rover System for Enhanced Search and

- Rescue Operations. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-6). IEEE
17. Velvizhi, V. A., Anbarasan, M., Sandhya, R., & Varsha, K. (2024, October). Immaculate Water Tank. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-5). IEEE
 18. Velvizhi, V. A., Anbarasan, M., & Gayathiri, S. (2024, October). Comparative Analysis of Epileptic Seizure Detection Techniques. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-4). IEEE
 19. Gayathri, S., Velvizhi, V. A., Lalitha, K., Anitha, R., Priyadharshini, B., & Kiruthika, A. (2024, October). Advancing Public Premises Surveillance: A YOLO-Based IoT Camera System with CHATBOT Integration. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-6). IEEE.
 20. Gayathri, S., Abhinesh, S. B., Jaivignesh, K., Pavithran, V., Velvizhi, V. A., & Anbarasan, M. (2024, October). Collision Detection and Evacuation Systems for Enhanced Safety. In *2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS)* (pp. 1-5). IEEE
 21. Velvizhi, V. A., & Anbarasan, M. (2025, April). Real-Time Energy Monitoring for Renewable Power Systems: Enhancing Stability and Efficiency with IoT-Based Wireless Sensor Networks. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-4). IEEE
 22. Gayathri, S., Shanthakumari, G., Velvizhi, V. A., Anitha, R., Priyadharshini, B., & Kiruthika, A. (2025, April). Design and Development of IoT-Based Domestic Surveillance System with Real-Time Anomaly Detection and Chatbot Integration. In *2025 International Conference on Computing and Communication Technologies (ICCCT)* (pp. 1-5). IEEE

Book Chapter:

1. “Emerging Technologies in Engineering Research”, VA Velvizhi, K Jeyapiriya, S Gayathri, J Prakash, ISBN: 978-93-5419-211-1 (Online)
2. 6G With TeraHertz Communications, G Senbagavalli, T Kavitha, A Ramalingam, VA Velvizhi - Handbook of Research on Design, Deployment ..., 2022, Related articles All 2 versions.

3. Chapter 3. A Panorama of Communication Technologies for IoT Connected Devices, G. Senbagavalli¹, V.A. Velvizhi², T. Sukanya Prasad³ and S.T. Bibin Shalini⁴, Internet of Everything: Smart Sensing Technologies, Series: [Internet of Things and Machine Learning](#), BISAC: COM095000, DOI: <https://doi.org/10.52305/PNQM1088>
4. Chapter 3, Deep Learning - Based Intelligent Sensing in IoT, (P42-70), V. A. Velvizhi, Convergence of Deep Learning and Internet of Things: Computing and Technology, IGI Global, 2023
5. Early Detection of Breast Cancer Using CNN, 2023, Book Chapter “Emerging Technologies in Data Mining and Information Security”, Pages 577-587, Springer, Singapore.
6. Chapter 6 ‘Enhancing IoT Security with Cryptographic Approach’, V. A. Velvizhi, IoT Cybersecurity Trends, Challenges, and Solutions, Routledge, Taylor and Francis Group, First Edition, Copyright 2026.

Books Published

1. Published a book titled ‘Basic Electronics - A Beginner's Guide’ - ISBN: 978-93-5757-716-8, First Edition - 2023

Patent Details:

1. ONE BIT COMPRESSION SENSING MECHANISM FOR LOW RATE WIRELESS SENSOR NETWORKS Inventor(s): Maheswari, B. Uma and Periyaaazhagar, D. and Anand, J. V. and Saravanan, T. and Angappan, Kumaresan and Balasaraswathi, M. and Sudha, G. and Karunkuzhai, D. and Velvizhi, V. A. and Jeyapiriya, K., Assignee: AUSTRALIAN PATENT OFFICE Published: 2021-02-11
2. Electric vehicle charger Inventor(s): Sankari, K Subhashini, Velvizhi, Assignee: IPR Published: 2021-11-16
3. A NOVEL ASSEMBLY HAVING PHYSICAL UPLINK SHARED CHANNEL WITH SWITCHED ANTENNA FREQUENCY DOMAIN RESOURCE ALLOCATION DETERMINATION Inventor(s): Dr. S. Brindha, 2)V.A.Velvizhi 3)K.Jeyapiriya 4)S.Gayathri , Assignee: IPR Published: 0000-00-00
- 4) IOT FIRE SENSOR AND IOT SMART SENSOR MANAGEMENT SYSTEM, India, Application No.202341075483, 23/12/2022, Published

5) 'SMART ASSISTIVE GLASSES FOR VISUALLY IMPAIRED', Application No. 202541038478, Inventor(s): V. A. Velvizhi, IPR:Published.

Additional Details: