


<h2 style="text-align: center;">Faculty</h2>	<p>Name: Dr.T.Cynthia Anbuselvi</p> <p>Designation: Associate Professor</p> <p>Department: AIML</p>
	<p><b>Profile</b></p> <p>Dr.T.Cynthia Anbuselvi obtained her B.E. degree from Kamaraj College of Engineering and Technology, M.E. degree from Thiagarajar College of Engineering, and PhD (Full time) from Anna University in 2009, 2011 and 2020 respectively. She is currently working as Associate Professor in East Point College of Engineering and Technology, Bangalore. Having a 13+ years of experience in the teaching, research and mentoring the students. Recognized and approved as a research supervisor in VTU from 2023 and guided 1 PhD Scholar. She has published papers in reputed SCI Indexed journals with high impact factor. She has published papers in the national, international conferences and has published multiple patents. Reviewer in SCI Indexed journals. Her research interest includes Machine Learning, IoT, Cyber Security, Wireless Communication, Cognitive Radio Networks and Smart Grid. Completed AICTE QIP PG CERTIFICATION in CYBER SECURITY from IIIT DHARWARD. Completed Domain Certification from NPTEL in “Data Science”. Engaged myself in research activities and applied for research funds; VGST –ECRA, SERB-POWER, SERB-SCSP. Reviewer in Wireless Personal Communications, Springer Publications (Q2 Journal) and International Journal of Electronics, Taylor and Francis (Q2 Journal). NPTEL Topper in IoT and certified in Machine Learning, Data Science, Artificial Intelligence, Deep Learning, Python for Data Science, and Biomedical Signal Processing, and AICTE’s Universal Human Values (UHV-I) program.</p>
	<p><b>Publications</b></p> <p><b>Books</b></p> <ul style="list-style-type: none"> <li>Published book titled “Digital System design using Verilog    Coding the Future with Verilog  ” ISBN: 978-81-965342-1-9, DOI: <a href="https://doi.org/10.5281/zenodo.8238480">https://doi.org/10.5281/zenodo.8238480</a> by RAALTECH Publications</li> </ul>

**Journals**

- Cynthia Anbuselvi Thangaraj, “Optimizing Air Conditioning Control with Fuzzy Logic and IoT Sensor Based Automation”, Journal of Engineering Science and Technology Review, 2025 (Q4) doi:10.25103/jestr.185.20.
- Cynthia Anbuselvi Thangaraj, “Design of monopole circular patch antenna based on DGS for UWB applications”, in Antennas for Industrial and Medical Applications with Optimization Techniques for Wireless Communication, Taylor and Francis Group, CRC Press Book Chapter, (Scopus Indexed), 2024.
- Cynthia Anbuselvi Thangaraj, “Enhancing Object Detection with AI-Driven Deep Learning Techniques”, in Tuijin Jishu/Journal of Propulsion Technology, (Scopus Indexed), 2024. (Q4)
- Cynthia Anbuselvi Thangaraj, “Advanced Object Detection Using Artificial Intelligence Based Deep Learning Techniques”, ISSN: 2096-3246, Volume 56, Issue 02, October, 2024, Advanced Engineering Science
- Cynthia Anbuselvi Thangaraj, “A Modified 2:1 Multiplexer-Based Low Power Ternary ALU for IoT Applications”, Journal of Engineering Science and Technology Review, 2024 (Q4)
- Cynthia Anbuselvi Thangaraj, “Applications of Artificial Intelligence in Thrust Manufacturing Enhancing Precision and Efficiency”, in Using Real-Time Data and AI for Thrust Manufacturing, IGI Global Book Chapter, (Scopus Indexed), 2024.
- Cynthia Anbuselvi Thangaraj, “Vehicular Support System for User and Vehicle Accident Prevention” in EAI/Springer Innovations in Communication and Computing Book series, pp 207–215, DOI: 10.1007/978-3-031-07654-1\_15, (Q3), October 2022.
- Cynthia Anbuselvi Thangaraj, "Deep Neural Networks for Medical Image Segmentation: Geodesic Distance Transform", Int. J. of Medical Engineering and Informatics, INDERSCIENCE, 10.1504/IJMEI.2022.10050839, (Q3), November 2022.
- Cynthia Anbuselvi Thangaraj, Aruna Velkennedy & Shiny Ponmani 2019, “Simultaneous wireless information and power transfer in energy-augmented amplify and forward cooperative cognitive networks”, IET Communications, DOI: 10.1049/iet-com.2018.5843, (Q2), Impact Factor: 1.86.
- Cynthia Anbuselvi Thangaraj & Aruna Velkennedy, “Energy-Efficient Power Allocation with Guaranteed QoS under Imperfect Sensing for OFDM-based Heterogeneous Cognitive Radio Networks” in Wireless Personal Communications, Springer Publications, DOI: 10.1007/s11277-019-06655-w, (Q2), Impact Factor: 2.20 .

- Cynthia Anbuselvi Thangaraj and T.Aruna, “Performance Enhancement of Cognitive Radio Networks with Energy Harvesting” in International Journal of Advanced Research in Innovative Discoveries in Engineering and Applications, Vol.3, Issue 2, 27 , pg. 58-65, April 2018.

**PATENT:**

- Published patent on “AI Integrated Agricultural Leaf Disease Detection Device”, Design number: 485930-001 dated 31/12/2025
- Granted patent on “ Artificial Intelligence Based Agriculture Management System”, Design number: Design number: 6356606 Grant date: 08/03/2025.
- Granted patent on “AI based Pedestrian Traffic Display”, Design number: 6356606 Grant date: 20/04/2024.
- Published patent on “Farm Analyzing Robot using Internet of Things”, application no: 202341074390 dated 15/12/2023.
- Published patent on “A device to monitor surveillance in college bus using IOT”, application no:202341053065 dated 01/09/2023.

**Conferences**

- “Data Transmission through LiFi’, in International Conference on Technology, Engineering, Arts, Management and Science (ICONTEAMS 2026), Jeppiaar University, Chennai
- “Underwater Wireless Optical Communication” in IEEE International Conference on Multidisciplinary Research in Technology and Management (MRTM 2023), New Horizon College of Engineering, Bangalore.
- "Robotic Voice Controlled car using Arduino and Bluetooth" in International Conference on Advanced Research in Information and Communication Technologies organized by J P College of Engineering, Tenkasi
- “Voice-Controlled Mobility of Robotic Car using Bluetooth and Arduino-Based Microcontroller” in International Conference on Recent Trends in Science, Engineering and Management (RTSEM 2023) organized by Er.Perumal Manimekalai College of Engineering, Hosur.
- Improving the Throughput of MIMO ADHOC Networks with Spatial Multiplexing and Scheduling”, in National Conference on Signal Processing, Communication and VLSI Design (NCSCV’ 11) Organized by Anna University of Technology, Coimbatore.
- “Capacity Enhancement of Mobile Ad Hoc Networks using Cooperative MIMO Relaying”, in National Conference on Signal Processing, Communication and VLSI Design (NCSCV’ 11) Organized by Anna University of Technology, Coimbatore.

- “Design and Performance Evaluation of Cognitive Radio Networks”, in IEEE Sponsored International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS'17) Organized by Karpagam College of Engineering, Coimbatore.
- “Performance Analysis of Energy Assisted Relaying Techniques in Cooperative Wireless Networks” in IEEE International Conference on Wireless Communications, Signal Processing and Networking (WISPNET 2018) organized by SSN College of Engineering, Chennai.
- “Performance Enhancement of Cognitive Radio Based Smart Grid” in IEEE conference on Recent Advances in Energy-Efficient computing and communication (ICRAEC) organized by St.Xaviers’ Catholic College of Engineering, Nagercoil.

#### **Achievements / Awards / Recognitions**

- AICTE QIP PG CERTIFICATION in CYBER SECURITY from IIT DHARWARD.
- Domain Certification from NPTEL in “Data Science”.
- Reviewer in Wireless Personal Communications, Springer Publications (Q2 Journal) and International Journal of Electronics, Taylor and Francis (Q2 Journal).
- NPTEL TOPPER in ‘Introduction to Internet of Things’ course.
- NPTEL ELITE CERTIFICATION in ‘Introduction to Machine Learning’ and ‘Data Science for Engineers’ course.
- UHV-1 CERTIFICATION in ‘Inculcating Universal Human Values in Technical Education’ by All India Council for Technical Education (AICTE)
- Organizing Chair in IEEE International Conference on Inventive Computing and Informatics (ICICI 2024) & (ICICI 2025)
- Advisory member in International Conference on Advanced Research in Information and Communication Technologies (ICARICT 2022,2023,2024 & 2025) organized by JP College of Engineering, TamilNadu.

#### **Workshops / FDPs / Seminars**

- FDP on “Natural Language Processing”, NPTEL SWAYAM, January to April 2025.
- FDP on “Business Intelligence and Analytics”, NPTEL SWAYAM, January to April 2025.
- ATAL Faculty Development Program on “Programmable Cities”, AICTE, December 2024.
- EBSCO eBooks/ECM, EBSCO, March 2025.
- VTU Internship Program, VTU Regional Center Bangalore, September 2024.

- FDP on “Introduction to Internet of Things”, NPTEL SWAYAM, July to October 2024.
- FDP on “Data Science for Engineers”, NPTEL SWAYAM, July to September 2024.
- FDP on “The Foundations and Future of Quantum Computing”, Sri Sairam College of Engineering, May 2025.
- One Month Course on “Quantum Computing”, Centre for Development of Advanced Computing, May 2025.
- Work Shop on VLSI System Design: Silicon to End Application Approach Organized –All India Council for Technical Education (AICTE), Arm Education and ST Microelectronics from July 31st to 4th August 2023.
- FDP on “Recent trends in semiconductor industry and its impact on VLSI Design”, January 2024.
- ATAL FDP on “Capacity Building on Research and Consultancy skills for young researchers and academicians”, January 2024.