

Name of Faculty Dr. P.Anuradha  
 Designation Associate Professor  
 Nature of Job/Appointment Regular  
 Date of Joining 28-12-22  
 E-mail anuradhap\_ece@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph.D.	Doctor of Philosophy (Embedded Systems) JNTU, Hyderabad	Awarded
PG	M.Tech (Embedded Systems) SR Engineering college, Warangal	Distinction
UG	B.Tech (ECE) NIT, Warangal	First

Work Experience

Teaching	20 Years
Research	--
Industry	--
Others	--

Area of Specialization Embedded Systems and VLSI

Academic Identity Scopus Id: 58976943200 Orcid Id: 0000-0001-5303-1896

Professional Memberships IETE- AM-237174, MIEANG - 377418

Responsibilities held at Institution Level

1. Member, Student Counselling Committee
2. Member, Internal Complaint Committee

Responsibilities held at Department Level

1. Coordinator of Academic and Administrative Audit
2. Coordinator of Mentoring

Research Guidance Guided 16 MTech projects

Awards Received ---

Courses Handled at Under Graduate / Post Graduate Level. VLSI Technology, Digital Systems Design, Embedded systems, VLSI Design and Technology, Signals and Systems, Digital signal processing, Microcontrollers and Applications, ARM architectures, Microprocessors and Embedded Systems, Digital Logic Design, CPLD & FPGA Architectures and Applications, RTL Synthesis and Simulation with PLDs

No. of Papers Published National Journals -- International Journals -- 40  
 National Conference -- 2 International Conference -- 18

Projects Carried out Department of Science and Technology(DST) funded project completed under Women Scientists Scheme (WOS-A) during 2012-2015

Project Role: Principal Investigator

Patents	03
Technology Transfer	----
Invited Speaker	----

No. of Books/Chapter Published with details	<ol style="list-style-type: none"> <li>1. J. Ravichander, P. Anuradha, B.Girirajan, Innovative Practices for Effective Education, Lambert Academic Publishing, Germany, 2020, ISBN: 978-620-3-02767-9</li> <li>2. P. Anuradha, J. Ravichander, B.Girirajan, Efficient Pedagogy for Teaching Learning Process, Lambert Academic Publishing, Germany, 2020, ISBN: 978-620-3-04264-1</li> <li>3. P. Anuradha, J. Ravichander, B.Girirajan, Effective Instructional Pedagogy Process, Lambert Academic Publishing, Germany, 2020, ISBN: 978-620-3-19839-3</li> <li>4. B.Girirajan , J. Ravichander, P. Anuradha, Student Centric Engineering Education, Lambert Academic Publishing, Germany, 2020, ISBN: 978-620-3-20266-3</li> </ol>
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Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings ( <b>Attended and/or Organized</b> ).	<p><b>Organized:</b></p> <ol style="list-style-type: none"> <li>1. One-week FDP on Digital and Analog VLSI Design: Concepts and Applications (03/06/2024–07/06/2024) at CBIT.</li> <li>2. One-week FDP on IoT Enabled Embedded Systems (22/07/2024–26/07/2024),at CBIT in collaboration with NITTTR-Chandigarh.</li> </ol> <p><b>Attended: NPTEL</b></p> <ol style="list-style-type: none"> <li>3. 12 weeks NPTEL Online training program on VLSI Design Flow: RTL to GDS, 2024.</li> <li>4. 4 weeks NPTEL Online training program on Python for Data Science, 2024.</li> <li>5. 8 weeks NPTEL Online training program on System Design Through Verilog,2023</li> <li>6. 12 weeks NPTEL Online training program on Digital Design with Verilog, 2023.</li> <li>7. 4 weeks NPTEL Online training program on Teaching And Learning in Engineering (TALE), 2023.</li> <li>8. 8 weeks NPTEL Online training program on CMOS Digital VLSI Design, 2022.</li> <li>9. 12 weeks NPTEL Online training program on Digital Electronic Circuits, 2022.</li> </ol> <p><b>Other notable FDPs:</b></p> <ol style="list-style-type: none"> <li>10. One week ATAL FDP on IoT based Sensor technology for Industry 5.0, at CBIT, 2024.</li> <li>11. two weeks FDP Transforming Education: Integrating OBE and NEP 2020, at CVR College of Engineering, 2024</li> <li>12. National Level One Week Faculty Development Programme (Hybrid) on “National Education Policy 2020 - Challenges in implementation in Higher Education, at CBIT, 2023.</li> <li>13. One week FDP on Application of AI/ML Using Pattern Recognition &amp; Intellectual Property Rights, at CBIT, 2023.</li> <li>14. One week FDP on Machine Learning for Real Time Embedded Systems and IoT Applications, at CBIT in association with NITW, 2023.</li> <li>15. AICTE Recognized One week FDP on OBE and NBA Accreditation, at CBIT association with NITTTR Chandigarh2023.</li> </ol>
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Details of Journal Publications/ Conferences

**International Journal publications**

1. Anuradha, P., Majumder, P., Sivaraman, K., Vignesh, N.A., Jayakar, A., Anthonirj, S., Mallik, S., Al-Rasheed, A., Abbas, M. and Soufiene, B.O., 2024. Enhancing high-speed data communications: Optimization of route controlling network on chip implementation. IEEE Access. Vol.12, pp. 123514- 123528.
2. P. Anuradha, K. Vasanth, G. Renuka, A. Rajeshwar Rao, IoT based enabling home automation system for individuals with diverse disabilities, e-Prime - Advances in Electrical Engineering, Electronics and Energy, Volume 6, 2023,100366,ISSN 2772-6711,https://doi.org/10.1016/j.prime.2023.100366.

3. Anuradha, P., Navitha, C., Renuka, G., Jithender Reddy, M. and Rajkumar, K., 2023. A deep learning framework optimised by Harris Hawks algorithm for intelligent ECG classification in WSN-IoT environment. *Journal of Intelligent & Fuzzy Systems*, (Preprint), pp.1-13.
4. Renuka, G., Anuradha, P., Reddy, P.L., Gurumurthy, V. and Rajkumar, K., 2023. Implementation of TCAM Controller Enabled CDMA Network on Chip Router for High-Speed 5G Communications. *SN Computer Science*, 4(6), p.740.
5. Prabhu, R., Archana, P., Anusooya, S. and Anuradha, P., 2023. Improved Steganography for IoT Network Node Data Security Promoting Secure Data Transmission using Generative Adversarial Networks. *The Scientific Temper*, 14(03), pp.938-943.
6. P. Anuradha, "QCA Based Approximate Multipliers and Adders Method", *Materials Today: Proceedings*, ISSN 2214- 7853, pp. 1-4, Mar 2021.
7. P. Anuradha, Rajeshwar Rao Arabelli, K. Rajkumar, "Noise Removal of ECG Signals with Adaptive Filtering", *Materials Today: Proceedings*, ISSN 2214- 7853, pp. 1-6, Mar 2021.
8. Samra Jabeen, S. Jha, P. Anuradha, "Impact of Variation of Device Parameters on the Electrical Characteristics of Double-Gate MOSFETS", *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, ISSN 2278-3075, Vol.9, Issue No.3, pp. 3658-3661 JAN 2020.
9. P. Anuradha, "An Intelligent Computing Framework For Multicore Heterogeneous Embedded Architectures", *International Journal of Advanced Science and Technology*, ISSN 2005-4238, Vol. 28, No. 17, pp. 701-708, DEC 2019
10. P. Anuradha, "The Teaching Learning Process", *International Journal of Advanced Science and Technology*, ISSN 2005-4238, Vol. 28, No. 17, pp. 709-714, DEC 2019.
11. P. Anuradha, "Software and Hardware Tool for the Development of Embedded Software and a Study on Applications and Characteristics of Embedded System", *International Journal of Advanced Science and Technology*, ISSN 2005-4238, Vol. 28, No. 17, pp. 1-8, DEC 2019.
12. Veeramaneni Sharath kumar, P.Anuradha, "Power Consumption Optimization and Home Automaton using Smart Sensor Networks" *International Journal of Innovative Technology and Exploring Engineering (IJITEE)* , ISSN 2278-3075, Vol. 8, No.6S4, pp. 837-841, April 2019.
13. P. Anuradha, Hemalatha Rallapalli, G. Narsimha, "Energy Efficient Scheduling Algorithm For The Multicore Heterogeneous Embedded Architectures", *Springer SCIE journal Design automation for embedded systems*, Vol. 21, No. 4, pp. 1-12, 2018, DOI: 10.1007/s10617-018-9202-7
14. P. Anuradha, Hemalatha Rallapalli, G. Narsimha, "Versatile Intelligent ELM Algorithm for Workload Characterization", *Journal of Advance Research in Dynamical and Control Systems(JARDCS)* , ISSN 1943-023X, Vol. 10, pp. 177-184, July 2018
15. P. Anuradha, Hemalatha Rallapalli, G. Narsimha, "Characterization of SPEC Benchmarks", *International Journal of Pure and Applied Mathematics*, ISSN: 1314-3395, Vol. 118, No.24, pp. 1-9, June 2018.
16. Jaffreen Samdani, P.Anuradha, "VLSI Architecture of a High Speed Polar Code Decoder using Finite Length Scaling LDPC Codes", *Journal of Advance Research in Dynamical and Control Systems(JARDCS)* , ISSN 1943-023X, Vol. 10, pp. 153-161, July 2018 .

#### **International Conference Publications**

1. Vasanth, K., Nithin, M.C., ALN, S.D., Narasimhulu, C.V. and Anuradha, P., 2024, August. VLSI Implementation of an Efficient 2D Median Finding Algorithm for Non Linear Image Filtering. In *2024 7th International Conference on Circuit Power and Computing Technologies (ICCPCT)* (Vol. 1, pp. 1387-1391). IEEE.
2. Anuradha, P., Arabelli, R., Teja, K.S., Ravichander, J. and Kumari, D.R., 2024, June. Implementation of traffic light controller using Raspberry PI PICO. In *AIP Conference Proceedings* (Vol. 2971, No. 1). AIP Publishing.
3. Vasanth, K., Radha, S., Kondoju, S.K., Anuradha, P., Anusha, N. and Thyagarajan, K., 2023, December. Impact on Ocean Acidification Along the Hawaii Coastline Using Learning Algorithm. In *Proceedings of International Conference on Recent Advancements in Artificial Intelligence* (pp. 157-166). Singapore: Springer Nature Singapore.
4. Arabelli, R., Anuradha, P., Manoharan, G. and Renuka, G., 2024, June. Automated Hydroponic Farming System. In *2024 3rd International Conference on Computational Modelling, Simulation and Optimization (ICCMSO)* (pp. 142-145). IEEE.
5. P. Anuradha, Rajeshwarrao Arabelli, K. Rajkumar and Ch. Padmaja. "MIMO-OFDM based high-rate information transmission through ultrasonic", *AIP Conference Proceedings* 2418, 030059 (2022);

6. Anuradha, K. Rajkumar, Rajeshwarrao Arabelli and R. Shareena, "Implementation of high speed 64-bit MAC unit using FPGA", AIP Conference Proceedings 2418, 030060 (2022);
7. P. Anuradha, Hemalatha Rallapalli, G. Narsimha and Syed Mustak Ahmed, "Efficient Workload Characterization Technique for Heterogeneous Processors", IEEE International conference on Advance Computing Conference (IACC), DOI: 10.1109/IADCC.2015.7154819, pp. 812-817, 12th-13th Jun 2015, B.M.S. College of Engineering, Bangalore, India.
8. P. Anuradha, Hemalatha Rallapalli, G. Narsimha and Syed Mustak Ahmed, "An efficient methodology for workload reduction", 4th IEEE International Conference on communication and Signal Processing- ICCSP'15, ISBN 978-1-4799-8080-2, pp. 1684-1689, 2nd-3rd April 2015, Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu.
9. P. Anuradha, Hemalatha Rallapalli and Syed Mustak Ahmed, "Characterization of workload for multicore processor", International Conference on Photonics, VLSI & Signal Processing, pp.549-553, 28th-29th March 2014, Kakatiya University College of Engineering, Warangal, Andhra Pradesh.
10. P. Anuradha, Hemalatha Rallapalli and Syed Mustak Ahmed, "Spec 95 benchmarks simulation with simple scalar", 2nd International Conference on Communications & Signal Processing, pp. 157-161, 1st-3rd April 2013, at Ongole, Andhra Pradesh.
11. P. Anuradha, K.Kalpna and G.Renuka, "Adaptive filtering for noisy ECG signals" in two days National Level conference on Recent trends and Advances in Nano Technology, July 2011, Guru Nanak Engineering College, Hyderabad.

