Personal Information

Name	Dr. T Thammi Reddy
Years of Experience	Teaching: 17 years Industry: 07 years Research: NIL
Email Id (College Mail ID)	thammireddy@bvrithyderabad.edu.in
Areas of Specialization/Interest	VLSI, Embedded Systems, Processor Architectures



Educational Qualifications

Doctoral Degree	Ph.D.	JNTUH, Hyderabad, TS (VLSI)
PG Degree	M.Tech.	Microelectronics, IIT-BHU, Varanasi, UP.
UG Degree	B.Tech.	ECE, Sri Krishnadevaraya University (SKU), Anantapuramu, AP.

Papers Published

International Journal Publications

- 1. **T. Thammi Reddy**; B.K. Madhavi; K. Lal Kishore, "Area Efficient SDR Receiver with and without dynamic partial reconfiguration," in Special Issue on "Soft Computing Approaches and Intelligent Systems" of the *International Journal of Intelligent Systems Technologies and Applications (IJISTA)* by INDERSCIENCE. (SCOPUS), ACM Digital Library, Volume 17, Nos 1/2, 2018. pp 176-194; ISSN online: 1740-8873, ISSN print: 1740-8865.
- 2. Chaitanya, M; **T. Thammi Reddy**; Rajeswari, C; Haritha, G, "Irrigation Automation using IoT," Journal of Test, Engineering and Management ISSN: 0193 4120, Volume 82, Jan-Feb (2020), PP. 12377-12383
- 3. R. Mounika and **T. Thammi Reddy**," Design of Low power and high-performance Full Subtractor circuits by using 5T based XOR and XNOR combo gate", *Test Engineering and Management, The Mattingly Publishing Co. Inc*, Volume 83, (SCOPUS), ISSN: 0193-4120, PP: 6639-6645, May-June (2020)
- 4. Reddy, I. Sumanth Kumar; **T. Thammi Reddy**, "Analysis of DDS using Reversible Logic and CORDIC algorithm", International Journal of Recent Technology and Engineering (IJRTE), (SCOPUS). ISSN:2277-3878, Vol11, 03-Special Issue (2019)
- 5. Raghunandan, Avula; **T. Thammi Reddy**, "Implementation of Efficient FIR Filter Using Coefficient Synthesis Genetic Algorithm" Journal of Advanced Research in Dynamical and Control Systems (JARDCS), Vol. 10, Special Issue 03-, (SCOPUS), PP: 1326-1333, ISSN 1943-023X, (2018)
- 6. M. Mounika, and **T. Thammi Reddy**," International Journal of Engineering Science and Generic Research, Implementation of SHA-2(256) & SHA-3(512) Algorithms for Information Security.", *International Journal of Engineering Science and Generic Research (IJESAR)*, Volume 2, Issue 5, (2016), ISSN: 2456-043X
- 7. Mehjabeen, A., and **T. Thammi Reddy**," Implementation of Reusable DCT Architectures with Reversible Adders." *International Journal & Magazine of Engineering, Technology, Management and Research (IJMETMR), Yuva Engineers Publications*, Volume 3, Issue 10, (2016). ISSN: 2348-4845
- 8. Saipriya, G., and **T. Thammi Reddy**. "VHDL Implementation of Audio Processing Using Adaptive Filter." *International Journal of Science, Engineering and Technology Research (IJSETR)*, (2015)
- 9. Bhargavi, C., and **T. Thammi Reddy**. "Designing of High-Performance Floating-Point Processing Element for Reconfigurable Systems." *Journal of Innovation in Electronics and Communication Engineering* 5.1 PP: 34-42. (2015)
- 10. Madhavi, S., And **T. Thammi Reddy**. "Implementation of High-Speed MDC FFT/IFFT Processor for MIMO-OFDM Systems." *International Journal of Science, Engineering and Technology Research (IJSETR)* (2015).
- 11. Tanveer, D., and **T. Thammi Reddy**. "A 2-D DCTT Computation Based on Bivariate Algebraic Integer using Single Channel Architecture." *International Journal of Emerging Trends in Engineering and Development*, (2014)

- 12. Kamalesh, G., and **T. Thammi Reddy**. "FPGA implementation of high-speed PI like Fuzzy Control System for Industrial Automation Applications", *International Journal of Modern Engineering Research*, PP: 1447-1453, 3.3, (2013)
- 13. Vijaya Kumar. B., **T. Thammi Reddy**, "FPGA Implementation of High-Speed AES Algorithm for Improving the System Computing Speed", *International Journal of Computer Trends and Technology (IJCTT)*, Seventh Sense Research Group, Volume 4, Issue 9, PP: 2981-2985, ISSN 2231-2803, (2013)

International Conference Publications

- 1. **T. Thammi Reddy**; B.K. Madhavi; K. Lal Kishore, "Area Efficient SDR Receiver with Dynamic Partial Reconfiguration," *Inventive Research in Engineering and Technology (ICIRET)*, 2017 Inventive Research Organization (IRO) International Conference on, Bangkok, Thailand January 2017, pp 244-257; ISBN: 978-81-932480-1-0.
- 2. **T. Thammi Reddy**; B.K. Madhavi; K. Lal Kishore, "Area Efficient Implementation of FSK Receiver on Xilinx Zynq FPGA," in *Inventive Computation Technologies (ICICT), 2016 IEEE International Conference on*, vol. no.1 pp.0184-0190, 26-27 August 2016, Coimbatore, India. Print ISBN: 978-1-5090-12
- 3. **T. Thammi Reddy**; B.K. Madhavi; K. Lal Kishore, "Improved block-based processing with dual partial reconfiguration memory approach," in *Communications and Signal Processing (ICCSP), 2015 IEEE International Conference on*, vol., no., pp.0327-0331, 2-4 April 2015, Melmaruvathur, India.; Print ISBN: 978-1-4799-8080-2;
- 4. **T. Thammi Reddy**; T. Janardhan Reddy; B.K. Madhavi, "Reconfigurable Higher-Order IIR Filter Implementation on Zynq Platform with Low Resource Utilization" *Journal of Advanced Research in Dynamical and Control Systems (JARDCS)* ISSN: 1794-023X, (SCOPUS)
- 5. **T. Thammi Reddy**; Reddy, T. Janardhan; Madhavi, B. K, "Zynq-7000 AP SoC Implementation of Configurable Folded IIR Filter Design", *Trends in Engineering, Management, Pharmacy & Sciences (ICTEMPS) 2018 International Conference on*, 21st April 2018, Hyderabad, INDIA.

National Journal Publications: -

National Conference Publications

1. **T. Thammi Reddy**; B.K. Madhavi; K. Lal Kishore, "Reconfigurable Computing: A Taxonomical Survey," in Proceedings of *National Conference on Computing Communication & Instrumentation (NCCCI'12)*, Dec 2012, Hyderabad, India. Print ISBN: 978-81-923724-1-9

FDPs/Workshops Conducted:

- 1. Organized National FDP, "Recent Developments in VLSI Design and Its Research Trends" as convener from 30th Aug 2021 to 3rd Sep 2021 in GPREC Kurnool AP as convener.
- 2. Organized as moderator for a panel discussion on "How Can Our Engineering Graduate Be Industry Ready" at GPREC, Kurnool on 2nd Aug 2020.
- 3. Organized as a resource person for a webinar on "Formal Verification: Significance in VLSI Design Flow & SystemVerilog Assertions (SVA)" at GPREC, Kurnool on 12th June 2020.
- 4. Organized as a resource person for a 1-day da National level Workshop on VLSI Fabrication Principles and FPGA Design Flow (VFPFD-19) at GPREC, Kurnool on 17th June 2019.

MOOCs Completed

- 1. Hardware Modeling Using Verilog for 8 weeks during Aug-Oct 18 (NPTEL)
- 2. Introduction to Electronics for 4 weeks during May 2020 (Coursera)
- 3. Introduction to FPGA Design for Embedded Systems for 4-weeks during May 2020 (Coursera)
- 4. Embedded Hardware and Operating Systems for 4-weeks during May 2020 (Coursera)
- 5. Introduction to the Internet of Things and Embedded Systems for 4 weeks during May 2020 (Coursera)
- 6. How Computers Work for 4 weeks during May 2020 (Coursera)
- 7. Programming for Everybody (Getting Started with Python) for 4-weeks during May 2020 (Coursera)

FDPs and Workshops attended:

- 1. FDP on "Intellectual Property Rights" at GPREC, Kurnool, AP during 13 Jul- 17 July 2020
- 2. FDP on "IoT & Machine Learning" at GPREC, Kurnool, AP from 26 Jun-30 Jun 2020
- 3. Online "Partial Reconfigurable FPGA/SoC Xilinx Vivado" FDP by Apply Volt, Vijayawada, AP during 20-24 Jun 2020
- 4. FDP on "MOODLE LMS" by ATAL, IIITDM, Kurnool, AP during 21-22 May 2020
- 5. Online FDP on "VLSI Analog & Digital Design Perspective" by JNTUA Anantapur, AP during 16-17 May 2020
- 6. Online FDP on "Design, Implementation, and Verification" in VLSI by Sandeepani, Bengaluru during 27 Apr-1 May 2020
- 7. Online FDP on "ASIC Physical Design and Verification" by EXCEL VLSI, Bengaluru from 27 Apr-02 May 2020
- 8. Online FDP on "ASIC Synthesis and Static Timing Analysis" by EXCEL VLSI, Bengaluru during 20-25 Apr 2020

- 9. Tutorial on "IEEE VLSI Design" 2020 International Conf. by IEEE, Bengaluru during 4-8, Jan 2020
- 10. FDP on "Internet of Things" by ATAL, IIITDM Kurnool, AP during 15 Dec-19 Dec 2019
- 11. FDP on "Artificial Intelligence" by ATAL, IIITDM Kurnool, AP during 28 Nov-02 Dec 2019
- 12. FDP on "Designing with Zynq SoC and Its Applications" UIIC, JNTUH, Hyderabad during 16-18 October 2019
- 13. FDP on "DNA Of Mixed Signal IC design for portable Systems" by E&ICT, NIT Warangal, TS during 20-25 May 2019
- 14. FDP on "Outcome-Based Education (OBE)" by E&ICT, NIT Warangal & IIITDM-Kurnool, AP during 6-11 May 2019
- 15. FDP on "Adv Embedded. System Design on Zynq Ultra Scale+ using Vivado" by CoreEL Bengaluru & JNTUH, Hyderabad during 30 Jul-3 Aug 2018
- 16. FDP on "Programming Xilinx Zynq SoCs with MATLAB and Simulink" by MATHWORKS, Hyderabad during 26-27 July 2017
- 17. FDP on "Generating HDL Code from Simulink" by MATHWORKS, Hyderabad during 24-25 July 2017
- 18. FDP on "CMOS, Mixed Signal, Radio Frequency VLSI Design" by MHRD, IIT-KGP & GPREC, Kurnool, AP during 26 Dec-4 Jan 2017
- 19. FDP on "VLSI Design" by APSSDC & SRKIT-Vijayawada during 15-9 Nov 2016
- 20. Workshop on "SoC Physical Design using CADENCE" by GPREC, Kurnool, AP during 4-5 Mar 2016
- 21. FDP on "Instructional Excellence in Intelligent Systems", FICE, INTEL & GPREC, Kurnool, AP during 17-19 Apr 2014
- 22. Workshop on "Analog and Digital CMOS Design flow using Mentor Graphics EDA Tools" by Mentor Graphics & GPREC, Kurnool, AP during 28-29 Nov 2012
- 23. Tutorial 25th International Conf.: "VLSI Design" IEEE, Hyderabad Chapter 7-11 during Jan 2012
- 24. FDP on "Embedded System-ARM" by MGIT, Hyderabad during 2-4 Dec 2009
- 25. Workshop on "Low Power VLSI Design" by MIST, Hyderabad during 22-23 Mar 2007
- 26. Workshop on "Nano-Electronics" by CBIT, Hyderabad during 25-26 Nov 2006

Professional Memberships:

1. Member of IEEE since 2012 with Membership No.: 92013805

Any Other Achievements:

- 1. Supervised 20 M.Tech students with their major project work in the VLSI domain.
- 2. Gained experience working with inter-disciplinary and multi-cultural teams in Japan and the USA.
- 3. Contributed to curriculum development, as BoS member, for 6 years at GPREC, Kurnool, AP.