Deepika P

Deepika P, Assistant Professor

B.E (Electronics and Communication Engineering),

Educational Qualification M.Tech (VLSI and Embedded systems).

Experience Teaching: 11 Years. Industry: 2 years

Area of Interest Digital system design, VLSI design, Low power VLSI, System

Verilog

Email ID deepikaprabhakar@rvce.edu.in

Date of Joining at RVCE: 21st August 2014

Subjects Handled : Advanced digital design using verlog HDL, Digital VLSI design, Algorithms for VLSI design, System Verilog for testing and verification

No. of Projects guided to UG Students: 20

No. of Projects guided to PG Students: 10

Publications:

- 1. Deepika P, Shylashree N "A fast half-subtractor using 8T static random access memory for in-memory computation" International Journal of Reconfigurable and Embedded Systems (IJRES) Vol. 14, No. 1, March 2025, pp. 273~281
- 2. Swaroop, Deepika Prabhakar "Hardhat Detection Using IR and Depth Frames" Journal of University of Shanghai for Science and Technology, Volume 23, Issue 6, June -2021
- 3. Jafar Sharif, [2] Jagadeesh Kishore, [3] Raj Kumar, [4] Arjun Kankanavadi, [5] Deepika Prabhakar," Multi level Home Security and intrusion detection System Using Arduino Mega and GSM" International Journal of Engineering Research in Electronics and Communication Engineering (IJERECE) Vol 8, Issue 5, May 2021.
- 4. Karthik Maiya*1 Deepika P2 "REVIEW ON EXISTING COUNTER MEASURES AGAINST SCAN BASED SIDE CHANNEL ATTACKS" International Journal of Engineering Technology Research & Management Vol-4 Issues 05, May -2020

- 5. Raghuvarya S,Deepika P "A Review on Power State Coordination in Application Processors using ARM Specified PSCI" International Research Journal of Engineering and Technology (IRJET)
- 6. Sachin Manohar Ranasubhe, Deepika P, "Review of Leakage Power Recovery Methodologies in VLSI Design" International Research Journal of Engineering and Technology (IRJET) Volume 7, Issue 6, June 2020 https://irjet.net/volume7-issue6 S.No: 59
- 7. Sumanth Sajjanar, Mrs. Deepika Prabhakar A Review on BIST Embedded I2C and SPI using Verilog HDL International Research Journal of Engineering and Technology (IRJET) Volume 7, Issue 5, May 2020 (https://irjet.net/volume7-issue5) S.No: 1208
- 8. Vishala I Nari1, Deepika P 2, "validation, timing analysis and power analysis of multifunctional io cell" published in journal of critics reviews -2020, vol 7, issue 14, 2020 . Jcr 2020

International conferences:

- 1. Deepika P, Nikita kulkarni "Optimal Design of Vedic Multiplier for Computation in Memory Applications" 8th IEEE International Conference on Computational Systems & Information Technology for Sustainable Solutions (CSITSS) 7th to 9th November, 2024.
- 2. Deepika P, Soumya aihole "RC Modelling and Analysis of Read Path in eFlash Memory" 2nd Global Conference on Information Technologies and Communications (GCITC) during 25th and 26th of October 2024
- **3.** Shridhar Patil, Deepika P "Compression of Bayer Colour Filter Array Images" 2019 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT-2019), MAY 17 th & 18 th 2019
- **4.** Govardhan, Deepika P, "Design and Verification of Asynchronous Design using Scalable Static and Formal Methodologies" MCCS 2021 conference
- **5.** Kavyashree.M, Deepika .P, "ASIC Implementation of I2C using Physical Aware Synthesis", MCCS 2021 conference

National conferences:

1. Deepika. P, "Implementation of compliment test pattern generator for low dynamic power onsumption", National conference on Recent trends in electronics and communication engineering, Bangalore- May 2012.

- 2. Deepika. P, Imran makkandar, "Improving the Efficiency of the IPSec Hardware Accelerator on Xilinx FPGA", National conference on ICT innovation for sustainability, Bangalore-*May 2014*.
- 3. Deepika P, Pavan Gujamagadi, Praveen Kumar V, "Modeling for FinFETs and Strategy for Test Algorithm Creation", Research Challenges in Power, Control, Communication and Instrumentation leading to Sustainable Technologies [NCPCCI-15], Bangalore-April 2014.

Book chapters:

1. Deepika Prabhakar, Neeta B Malvi, Sahana B. Rai, Anusha LS, Sai Priya L, Basavaneni Silpa," Emerging trends of hyperautomation in decision making process and sustainable Crop Production", Chapter 28, Hyperautomation in Precision Agriculture, Advancements and Opportunities for Sustainable Farming, Pages 331-339, 2025, Elsevier, Springer Direct.

Funded Projects:

Proposal entitled "Preparation and characterization of chalcogenide materials for phase change memory applications" was approved under VGST scheme of R-GSF Government of India

Awards:

9. "Implementation of compliment test pattern generator for low dynamic power consumption" Paper is awarded as best paper in the area of VLSI design.