

Name : **DR. RAJENDRA PRASAD SOMINENI**
 Designation : Professor and Head
 Department : ECE
 Mail.ID : rajendraprasad_s@vnrvjiet.in
 Experience (in years): Teaching: 20 Research: 10 Others (If any, Specify): 0



1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of Passing	Specialization
1	Ph.D	2015	Low-Power VLSI
2	M.Tech	2006	LICS
3	B.Tech	2002	ECE

2. Teaching and Learning:

- 2.1. Teaching Interests: MSRFIC, LPVLSID, ACMOSICD, Analog Circuits, VLSI, MPMC, EDC, ECA, SS, CT, CS, AC, DICA, PDC, EC, NA
 2.2. Novel Teaching & Learning Techniques adopted: WIT& WIL; POGIL
 2.3. Involvement in curriculum updating / Design: Yes

3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: Playing all Sports and Games
 3.2. CCA/ECA Organized: Organized Kabaddi in Sports Fest-2019, 2018, 2017, 2016 and 2015. Co-ordinator for Convergence 2K16.
 3.3. CCA/ECA participated: Nil
 3.4. Counselling and Mentoring Activity: Actively Involving
 3.5. Committees involved in:
 Department level: Head of the Department; BoS Chairman, Member of DAC;
 Institute Level: GC, FPDC, IAC, Finance Committee; IQAC Committee;

4. Conference / Workshop / Seminar / Guest Lectures:

- 4.1. Conducted: 2
 4.2. Attended: 35

5. Academic Contribution and Research & Consultancy:

- 5.1. Invited Lectures: 8
 5.2. Articles/Chapters published in Books: 5
 5.3. Books published as single author or as editor: Nil
 5.4. Projects Guided:
 a) UG: 25 b) PG: 8
 5.5. Research Interests: Low-Power VLSI; CNTFET-based Designs; Embedded Systems
 5.6. Ph.D students:
 a) Enrolled: 4 b) Submitted: Nil c) Awarded: Nil
 5.7. Papers published in reviewed Journals:

S. No	Title of the Paper	Journal Name Vol. No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	“Design and Performance Analysis of 6T SRAM Cell in Different Technologies and Nodes”	[J]. Int. J Performability Eng, 2021, 17(2): 167-177.	0973-1318	1.20/Scopus	International
2	VLSI based Error Correction Code	International Journal of	ISSN: 2249 – 8958	Scopus Indexed	International

	Using Fault-tolerant Parallel FFTs	Engineering and Advanced Technology (IJEAT) Volume-8, Issue-6, pp. 2361-2364, August 2019.			
3	Riverbed Modeler Simulation-Based Performance Analysis of Routing Protocols in Mobile Ad Hoc Networks	International Journal of Recent Technology and Engineering (IJRTE), Volume-7, Issue-6S, pp. 350-354 March, 2019.	ISSN: 2277-3878	Scopus Indexed	International
4	Low Power and High Speed Synchronous Carry Generate Adder using Modified Gate Diffusion Input Technique	International Journal of Engineering and Advanced Technology (IJEAT), Volume-8, Issue-2S2, pp. 192-196, January 2019.	ISSN: 2249 – 8958	Scopus Indexed	International
5	Performance Comparison for Ripple Carry Adder Using Various Logic Design.	International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8 Issue-4S2, pp. 372-377, March, 2019.	ISSN: 2278-3075	Scopus Indexed	International
6	Analysis of CMOS and CNTFET sense amplifiers in SRAM cell	International Journal of Creative Research Thoughts (IJCRT), Volume 5, Issue 4, pp. 2570-2577, December -2017	ISSN: 2320-2882	UGC Listed Journal No.- 49023	International
7	Performance Evaluation of	International Journal of Advance	ISSN (O): 2348-4470	UGC Listed Journal	International

	SRAM Cell Sense Amplifiers	Engineering and Research Development, e-Volume 4, Issue 6, pp. 751-758, June -2017		No.-44839	
8	Water Quality Monitoring and Controlling in Irrigation using Zigbee Technology	International Journal of Science, Engineering and Technology Research (IJSETR), Volume 4, Issue 1, pp. 210-214, January 2015	ISSN: 2278 – 7798	3.59	International
9	Real-Time Monitoring and Controlling of Undissolved Particle	International Journal of Science, Engineering and Technology Research (IJSETR), Volume 3, Issue 12, pp. 3496-3501, December 2014	ISSN: 2278 – 7798	3.59	International
10	Design of Low-Leakage CNTFET SRAM Cell at 32nm Technology using Forced Stack Technique	International Journal of Engineering Research and Applications (IJERA), Vol. 2, Issue 1, pp. 805-808, Jan.-Feb. 2012	ISSN: 2248-9622	1.69	International
11	Design of Low Write-Power Consumption SRAM Cell based on CNTFET at 32nm Technology	International Journal of VLSI Design & Communication Systems (VLSICS), Vol. 2, No. 4, pp. 167-177, Dec. 2011	ISSN:0976-1527	1.69	International
12	A New Low Power 9T SRAM Cell based on CNTFET at 32nm Technology Node	International Journal of Computer Science and Information	ISSN:0975-9646	2.93	International

		Technologies (IJCSIT), Vol. 2 (6), pp.2761-2764, Nov.-Dec. 2011			
13	High-Performance Memory Cell Design at 32nm Technology based on CNTFET for Low-Power Embedded Systems	International Journal of Advances in Science and Technology (IJAST), Vol. 3, No. 4, pp.46-52, Oct.-2011	ISSN:2229-5216		International
14	Reduction of Delay and Cross Talk using Buffer Insertion Method	International Journal of Electrical, Electronics & Computing Technology, Vol.1(2), pp.34-40, Jan.-Apr. 2011	ISSN: 2229-3027		International
15	Conceptual and Optimization Problems in Wireless Ad-hoc Sensor Networks	International Journal of Electrical, Electronics and Computing Technology (IJEECT), Vol.1, Issue-1, September-December 2010, pp 52-57	ISSN: 2229-3027		International

5.8. Papers presented at National / International Conferences:

S. No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Design and Analysis of Different Full Adder Cells Using New Technologies”	Lect. Notes Electrical Eng., Margarita N. Favorskaya et al. (Eds): Innovations in Electrical and Electronic Engineering, 496540_1_En, (Chapter 45), Vol. 661, 978-981-15-4691-4. August 24, 2020	International	2020-21
2	Design of Low Power Multiplier Using CNTFET	2017 IEEE 7 th International Advance Computing Conference (IACC-2017)	International	2016-17

3	Implementation of wireless Sensor Network for Real Time Overhead Tank Water Quality Monitoring	2017 IEEE 7 th International Advance Computing Conference (IACC-2017)	International	2016-17
4	Design and Implementation of Wireless Sensor Node for Water Quality Monitoring System	IEEE 4 th International Conference on Computing, Communication and Sensor Network (CCSN-2015), 24-25 th December, 2015, in Kolkata, India.	International	2015-16
5	Implementation of Wireless Sensor Network for Water Quality Measurements	IEEE 4 th International Conference on Computing, Communication and Sensor Network (CCSN-2015), 24-25 th December, 2015, in Kolkata, India.	International	2015-16
6	Network-On-Chip Technology using Encoding Techniques	IEEE 4 th International Conference on Computing, Communication and Sensor Network (CCSN-2015), 24-25 th December, 2015, in Kolkata, India.	International	2015-16
7	Low-Leakage CNTFET Full Adders	IEEE Global Conference on Communication Technologies (GCCT - 2015), April 23-24, 2015, Kanyakumari, INDIA.	International	2014-15
8	Low-Leakage CNTFET SRAM Cells	Elsevier Third International Conference on Recent Trends in Computing (ICRTC 2015), Delhi, India, March 12 th – 13 th , 2015	International	2014-15
9	Data-Retention Sleep Transistor CNTFET SRAM Cell Design at 32nm Technology for Low-Leakage	Springer 2 nd International Conference on Advances in Information Technology and Mobile Communication – AIM 2012, Bangalore, India, April 27-28, 2012, pp.247-253.	International	2011-12
10	A CNTFET SRAM Cell Design at 32nm Technology for	IEEE 4 th International Conference on Electronics Computer Technology (ICECT-2012), Kanyakumari, India, April	International	2011-12

	Low Leakage-Power	6-8, 2012, pp.298-302.		
11	Reduction of Leakage-Power in CNTFET SRAM Cell using Stacked Sleep Technique at 32nm Technology	IEEE International Conference on Advances in Engineering, Science and Management (ICAESM-2012), Nagapattinam, India, March 30-31, 2012, pp.244-248	International	2011-12
12	Design of 32nm Forced Stack CNTFET SRAM Cell for Leakage Power Reduction	IEEE International Conference on Computing, Electronics and Electrical Technologies (ICCEET-2012), Nagercoil, India, March 21-22, 2012, pp. 629-633	International	2011-12
13	Design of a 32nm 7T SRAM Cell based on CNTFET for Low Power Operation	IEEE International Conference on Devices Circuits and Systems (ICDCS-2012), March 15-16, 2012, pp.443-446	International	2011-12
14	Low Leakage-Power SRAM cell design using CNTFETs at 32nm Technology	Springer 3 rd International Conference on Communication, Network, and Computing (CNC-2012), Chennai, India, February 24-25, 2012, pp. 165-171	International	2011-12
15	Design and Analysis of CNTFET-based Logic Gates at Nano Technology	National Conference on Emerging trends in Signal Processing and Embedded Systems (SPES-2012), Hyderabad, India, FeJanuary-2012	National	2011-12
16	Design and Analysis of Conventional SRAM Cell at 32nm Technology Node for Low-Power Embedded Systems	IETE National Conference on Recent trends in Communications & Signal Processing Techniques (SANKETA-2012), Tirupati, India, January-2012, pp.174-178	National	2011-12
17	Efficient Low Power Designs for Embedded systems	National Conference on Nanoelectronics, Vaagdevi College of Engineering, Warangal, on 25 th December, 2007	National	2007-08

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed
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1	Dev. of effective Wireless sensor Network system for water quality and quantity monitoring (AquaSense)	ITRA, Media Lab Asia, Delhi	5Yrs (Jan. 2014-Dec. 2019)	33 Lakhs	Completed
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5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed
	Nil				

5.11 Guest Editor/ Reviewer for:

1. Guest Editor - International Journal of Sensors and Sensor Networks (IJSSN)
2. IEEE - Transactions on Devices and Materials Reliability (<https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=7298>)
3. Elsevier - Microelectronics Journal (<https://www.journals.elsevier.com/microelectronics-journal>)
4. Springer - Journal of Computational Electronics (<https://www.springer.com/journal/10825>)
5. Scopus indexed - Heliyon - a peer-reviewed open access journal - (<https://www.cell.com/heliyon/home>)
6. Wiley - International Journal of Circuit Theory and Applications (IJCTA) (<https://onlinelibrary.wiley.com/journal/1097007x>)
7. Springer - International Journal of Speech Technology (IJST) (<https://www.springer.com/journal/10772>)
8. International Journal of Reconfigurable and Embedded Systems (IJRES) (<http://ijres.iaescore.com/index.php/IJRES/>)
9. International Journal of Distributed Sensor Networks (<https://in.sagepub.com/en-in/sas/international-journal-of-distributed-sensor-networks/journal202573#editorial-board>).
10. International Journal of VLSI Design & Communication Systems
11. Physical Review & Research International (www.sciencedomain.org).
12. IEEE International Conference on Information processing, 16-19, Dec-2016. (<http://www.icip.in/>)
13. 7th IEEE International Advance Computing Conference (IACC 2017), 5-7 Jan-2017 (<http://iacc2017.com/>).
14. International Journal of Sensor Networks published by Inderscience Publishers (<http://www.inderscience.com/>).

6. Awards / Honors received: Nil

7. Motto: Working hard with sincerity towards the goal.