Dr. Aditya Agarwal

Assistant Professor

Department of Electronics and Comm. Engineering,

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Education:

Degree	Specialization	University/College/School	Year of Passing
Ph.D	ECE - VLSI Design	Noida International University, Greater Noida, India	2022
M.Tech	VLSI Design	Shobhit University, Modi Puram, India	2009

Teaching Experience:

S. No.	Name of the Organization	Position Held	Duration
		Teaching Associate,	16/07/2008 -
1	SRM University, Ghaziabad, U.P., India	Department of	17/06/2010
1		Electronics and	
		Comm. Engineering	
		Assistant Professor	18/06/2010 -
2	SRM Institute of Science and Technology, Ghaziabad, U.P., India	Department of	Till Date
2		Electronics and	
		Comm. Engineering	

Patent: 03

S.No.	Application No. 202311031916	Title AUTOMATION,	Applicants Dr. Rahul Kumar Mishra,	Publication Date 09/06/2023	Application Status PUBLISHED
1.	202311031910	INTELLIGENT, AND SMART SYSTEMS USING AI-BASED MODELING: METHODS, APPLICATIONS, AND RESEARCH ISSUES	Dr. Railai Kuniai Misina, Dr. R. Sivaraman,Dr. Manoj Lipton, Dr. Aditya Agarwal, Mr. Deepak D J., Mr. Katroth Balakrishna Maruthiram, Dr. G.Nagaraj, Dr.Sarat Kumar Swain, Dr.Belsam Jeba Ananth M., Mr. Annam Karthik, Dr. Harikumar Pallathadka	03/00/2023	PUBLISHED

2.	400183-001	DIGITAL ANATOMAGE LEARNING TABLE	Dr. Aditya Agarwal, B.Preethi, Dr. C. Rohith Bhat, Mr. Nirmal Mahesh, MOHD ESA, Ms U Mehar Sudha	23/02/2024	GRANTED
3.	414810-001	ML BASED SOLAR ENERGY MANAGEMENT DEVICE	1. Dr. Aditya Agarwal 2.Dr Vishwa Priya V. 3.Pankaj Ramtekkar 4.Dr. Gitanjali 5. Nilesh Bhausaheb Nagare	04/07/2024	PUBLISHED

Journal Publications:

J17. **Aditya Agarwal**, Abhishek Kishor, Naman Yadav, Anshul Sharma, "Human Health Behaviour Monitoring system using IoT", Journal of Indian Institute for Engineering, Management and Science, Vol. 2, No. 1, pp. 43-50, September 2023, ISSN: 2455-3158,

https://rajshree.ac.in/wp-content/uploads/2023/10/new-e-Journal-Vol-2.pdf

J16. Selvabharathi Devadoss, Palanisamy Ramasamy, Amit, **Aditya Agarwal**, Saptarshi Gupta, "Design of 15 level reduced switches inverter topology using MSPWM", TELKOMNIKA Telecommunication Computing Electronics and Control, Vol. 21, No. 1, pp. 214-222, February 2023, ISSN: 1693-6930, DOI: 10.12928/TELKOMNIKA.v21i1.24263**SCOPUS** (**SNIP-0.579**)

http://telkomnika.uad.ac.id/index.php/TELKOMNIKA/article/view/24263/11575

- **J15. Aditya Agarwal**, Sharma R.L., P. Mani, "Analytical characterization of 3D nano scale ultra-thin film surrounding gate MOSFET", International Journal of Engineering Systems Modelling and Simulation, ISSN:1775-9758, E-ISSN:1755-9766, 13(2), 134-139, 6 June 2022. (**SCI IF- 1.1, SCOPUS SNIP- 0.410**) https://www.inderscienceonline.com/doi/abs/10.1504/IJESMS.2022.123350
- **J14.** Pharindra Sharma, Saptarshi Gupta, **Aditya Agarwal**, Neeraj Sahu, Vinoth kumar M, Manoj Kumar Vishnoi, Amit, Anurag Singh, "Eminent Method of Voice Identification by Applying Pitch, Intensity and Pulse", *American Institute of Physics Conference Proceedings*, Vol.2393, No. 1, pp. 020079-1-020079-6, 19 May 2022, ISSN:0094-243 XE-ISSN:1551-7616, DOI: 10.1063/5.0074174.(**SCOPUS SNIP- 0.314**) https://aip.scitation.org/doi/10.1063/5.0074174
- **J13. Aditya Agarwal**, R.L. Sharma, P. Mani, "Modeling and Analysis of High RF Behavior of Nano scale Surrounding Gate MOSFET", NeuroQuantology, ISSN: 1303-5150, Volume 20, Number 5, pp.3020-3030, May 2022. (**SCOPUS SNIP- 0.380**)

https://www.neuroquantology.com/open-

access/Modeling+and+Analysis+of+High+RF+Behavior+of+Nano+Scale+Surrounding+Gate+MOSFET_2594/

J12. Aditya Agarwal, R.L. Sharma, P. Mani, "Simulation and Performance Analysis of Electrical properties of Nano Scale Surrounding Gate MOSFET", Annals of the Romanian Society for Cell Biology, ISSN: 1583-6258, Vol.25, No. 3, pp. 2102-2110, March 2021; (**SCOPUS SNIP- 0.486**)

https://annalsofrscb.ro/index.php/journal/article/view/1651

- **J11.** P. Mani, K. Vijayan, P. Singh, A. Singhal, **Aditya Agarwal**, "Implementation of Low Power AMBA-AHB Bus Utilizing the Multi-Coding Technique", Annals of the Romanian Society for Cell Biology, ISSN: 1583-6258, Vol.25, No.3: pp.2111-2116, March 2021. (**SCOPUS SNIP- 0.486**) https://annalsofrscb.ro/index.php/journal/article/view/1652
- **J10. Aditya Agarwal**, R.L. Sharma, P. Mani, "A Study of Characterization of Surrounding Gate MOSFET, VSRD International Journal of Technical and Non Technical Research, e-ISSN: 0976-7967, p-ISSN: 2319-2216,Vol. 9, No.1, pp. 67-70, January 2018. (**UGC Approved**) https://www.vsrdjournals.com/pdf/VSRDIJTNTR/2018 1 January/12 Aditya Agarwal VSRDIJTNTR 13660 Review Pap

https://www.vsrdjournals.com/pdf/VSRDIJTNTR/2018 1 January/12 Aditya Agarwal VSRDIJTNTR 13660 Review Paper 9 1 January 2018.pdf

J9. Aditya Agarwal, Shivam Thakur, "Smart Wheelchair Based on Voice Recognition for Handicapped", International Journal for Scientific Research & Development, e-ISSN: 2321-0613, Vol. 6, No. 2: pp. 2948-2950, April 2018(**UGC Approved**)

https://www.ijsrd.com/Article.php?manuscript=IJSRDV6I21765

- **J8. Aditya Agarwal**, Aditya Sen, Kartik Mishra, Jasneet Singh, "Design and Implementation of an Automated Unmanned Tanker Robot Using Bluetooth Module and Microcontrollers", Journal of Network Communications and Emerging Technologies, ISSN: 2321-0613, Vol. 8, No. 5: pp. 58-62, May 2018. https://www.jncet.org/Manuscripts/Volume-8/Issue-5/Vol-8-issue-5-M-17.pdf
- **J7. Aditya Agarwal**, Jay Prakash Narayan Verma, Nishant Srivastava, "Design and Simulation of 16 Bit Vedic Multiplier Using Urdhva Tiryakbhyam Algorithm", ISSN: 0974-5572, Vol. 10, No. 8: pp. 543-551, January 2017.

https://serialsjournals.com/abstract/18014_61-aditya_agarwal.p.pdf

- **J6. Aditya Agarwal**, Kumari Soumya Naman Jain, Kashish Dhawan, "Smart Fire Detector And Smoke Extractor System With Gsm Technology", International Journal of Advanced Research in Engineering Technology & Sciences, ISSN: 2394-2819, Vol. 4, No. 3: pp. 01-08, March 2017. https://www.ijarets.org/publication/33/IJARETS%20V-4-3-1.pdf
- **J5. Aditya Agarwal**, Deepshikha Gupta, S.S. Anugna, Juhi Gupta, Anu Shrisvatava, "Automatic E-Toll System With Navigation, Tracking, Purchasing and Challaning using RFID", International Journal of Education and Science ResearchReview, e-ISSN: 2348-6457, p-ISSN: 2349-1817, Vol. 3, No. 2: pp. 01-08, April 2016. https://ijesrr.org/publication/31/IJESRR%20V-3-2-31.pdf
- **J4. Aditya Agarwal**, Karan Bhatia, Sanchita, "Automatic Security With Laser Shooter By PIR Technology With LCD Pageant", International Journal of Engineering Research & Management Technology, ISSN: 2348-4039, Vol. 2, No. 2: pp. 169-175, March 2015. http://www.ijermt.org/publication/14/IJERMT%20V-2-2-25.pdf
- **J3. Aditya Agarwal**, Manan Garg, "Energy Efficient Multimode Photonic Switch", International Journal of Advanced Research in Engineering Technology & Sciences, ISSN: 2394-2819, Vol. 2, No. 3: pp. 254-258, March 2015. https://www.ijarets.org/publication/8/IJARETS%20V-2-3-52.pdf
- **J2. Aditya Agarwal**, Nimmadala Siva Kumar, Bellana Vamsi Krishna, "Automatic Corporate Farming Control Mechanism (Using Embedded Systems and GSM Technologies", International journal of Engineering Research & Management Technology, ISSN: 2348-4039, Vol. 1, No.1: pp. 102-106, January 2014. http://www.ijermt.org/publication/1/28%20Paper%20aditya%2028.pdf

J1. Aditya Agarwal, "VLSI Implementation of Advanced Encryption Standard using Rijndael Algorithm", International Journal of Application or Innovation in Engineering and Management, ISSN: 2319-4847, Vol. 2, No. 4: pp. 486-491, April 2013.(<u>UGC Approved Journal No: 63975</u>).

 $\underline{file:///C:/Users/user.BB02ETMECC} AD 26/Downloads/143552828-IJAIEM-2013-04-23-058.pdf$

Papers Presented (Conference/Seminar):

C7. Amit, **Aditya Agarwal**, Saptarshi Gupta, Minakshi Sanadhya, Arun Kumar, Abhilasha Singh, "CNN-Based Adversarial Embedding for Image Steganograpy", Proceedings of International Conference on Information Technology, Lecture Notes in Electrical Engineering, vol 1079.Springer, Singapore, November 2023 (**SCOPUS**).doi.org/10.1007/978-981-99-5997-6_24.(**SCOPUS**)

https://link.springer.com/chapter/10.1007/978-981-99-5997-6_24

C6. Aditya Agarwal, Abhishek Kishor, Naman Yadav, Anshul Sharma, "Human Health Behaviour Monitoring System Using IoT", Proceedings of SDEMMS International Conference, 12 May 2023, Bareilly, India, ISSN:2455-3158.

https://rajshree.ac.in/wp-content/uploads/2023/10/new-e-Journal-Vol-2.pdf

- **C5. Aditya Agarwal**, R.L.Sharma, P. Mani, "An Investigation on Drain Current of Junction and Junctionless Surrounding Gate MOSFET", Proceedings of International Conference on Micro-Electronics and Telecommunication Engineering (ICMETE), Lecture Notes in Networks and Systems, vol 106. Springer, Singapore, pp. 593–599, September 2019, First Online: 03 April 2020(**SCOPUS**). https://link.springer.com/chapter/10.1007/978-981-15-2329-8 60
- **C4. Aditya Agarwal**, R. L. Sharma, P. Mani, "Analytical modeling electrical conduction of nano scaled Surrounding Gate MOSFET", Proceedings of IEEE International Conference on Micro-Electronics and Telecommunication Engineering (ICMETE),pp. 331-334, **DOI:** 10.1109/ICMETE.2018.00078,September 2018,Date added to IEEE Xplore:24 June 2019, (**SCOPUS**). https://ieeexplore.ieee.org/abstract/document/8742815
- **C3. Aditya Agarwal**,J P Narayan Verma, Nishant Srivastava, "Design and Simulation of 16 bit Vedic Multiplier using urdhvaTriyakbhyam Algorithm", International Conference on Advanced Trends in Engineering Science & Humanities (ICATESH), pp.543-551,Decemberr 2016(**SCOPUS**). https://serialsjournals.com/abstract/18014 61-aditya agarwal.p.pdf
- **C2. Aditya Agarwal**, J P Narayan Verma, "6-bit Array Multiplier for high speed computation using VHDL", Proceedings of International Conference on Micro-Electronics and Telecommunication Engineering, 'ICMETE 2016', September 2016,
- **C1. Aditya Agarwal**, "Analysis & Comparison of 1 bit full adder topologies on different technologies," *Proceedings of theNational Conference on Recent Trends in Information and Communication Technology (NCRTICT-2012)*, pp. 44-53, September 2012,

Book Chapters:

B3. Aditya Agarwal, R. L. Saharma, Prashant Mani, "An Investigation on Drain Current of Junction and Junctionless Surrounding Gate MOSFET", Studies in Micro-electronics and Telecommunication Engineering, (Springer), Vol 106, pp. 593-599, Print ISBN 978-981-15-2328-1, Online ISBN 978-981-15-2329-8, First Online: 3April 2020 (SCOPUS).

https://link.springer.com/chapter/10.1007/978-981-15-2329-8 60

B2. Aditya Agarwal, R. L. Saharma, Prashant Mani, "Analytical modeling electrical conduction of nano scaled Surrounding Gate MOSFET", Studies in Micro-Electronics and Telecommunication Engineering(IEEE), Vol 79, pp. 331-334,eISBN:978-1-5386-6918-1, Online ISBN 978-1-5386-6919-8, First Online: 24 June 2019 (SCOPUS).

https://ieeexplore.ieee.org/abstract/document/8742815

B1. Manash Sarkar, Saptarshi Gupta, Satya Sai Srikant, Anurag Singh, **Aditya Agarwal**, "An Intelligent and Optimistic Diseases Diagnosis: An IoT Based Smart City Paradigm", CRC Press Taylor & Francis Group, USA, Data Security in Internet of Things Based RFID and WSN Systems Applications (1st edition), 2020, eBook ISBN9780429294990.

 $\frac{https://www.taylorfrancis.com/chapters/edit/10.1201/9780429294990-1/intelligent-optimistic-disease-diagnosis-sarkar-manash-saptarshi-gupta-satya-sai-srikant-anurag-singh-aditya-agarwal}$

Book Published: 02

- Published book titled "Introduction to Nanoelectronics (Journey from micro to nano)" published by Shineeks Publishers, ISBN: 978-1-63278-927-3, December 2022. https://shineeks.com/product/introduction-to-nanoelectronics-journey-from-micro-to-nano-2/
- Published book titled "Fundamentals of Electronics Engineering" published by Shineeks Publishers, ISBN: 979-8-89496-003-6, September 2024. https://shineeks.com/product/fundamentals-of-electronics-engineering/

FDP & Programs attended:

- Completed online FDP on "Inculcating Universal Human Values in Technical Education (UHV-1)" organized by All India Council for Technical Education (AICTE) from 18th December to 22nd December 2023.
- Attended 'one week Faculty Development Program on Transforming Education with Industry 4.0', from June 15th - 20th 2020, conducted by JAYPEE University of Information Technology, Waknaghat Solan, Himachal Pradesh.
- Attended 'one week AICTE recognized short term course on Research Methodology through ICT' January 2017, conducted by Education and Education Management department from NITTTR Chandigarh, Ministry of HRD, Govt. of India.
- Attended 'two weeks Faculty Development Program on Entrepreneurship' by National Science & Technology Entrepreneurship Board, Department of Science & Technology, Govt. of India, New Delhi conducted by Department of ECE, SRM University on June 14th 28th 2017.
- Attended 'one week SAKSHAM–IT Champion Training Program' from June 13th- 18th 2016, conducted by Microsoft at SRM University, Ghaziabad.
- Attended 'three days Faculty Development Program on Entrepreneurship Development' from November 3rd -5 th 2015, conducted by State Bank of India Consultancy Service Cell Organized by Innovation and Entrepreneurship Development Centre, SRM University Ghaziabad.
- Attended 'one week ISTE–SRM short term training program on Virtualization Technology using VMware' conducted by SRM University, Ghaziabad sponsored by Indian Society for Technical Education (ISTE) New Delhi on May 19th 24th 2014.

• Attended 'Third Indian Youth Science Congress' at NASC Research Institute, New Delhi on November 3rd - 5th 2011.

Online Course:

- Completed Certificate Course on "The Data Science Course Complete Data Science Bootcamp 2023" organized by Udemy on November 2023.
- Completed Certificate Course on "Computer networks and Internet Protocol" organized by NPTEL, IIT Kharagpur on Jan to April 2020.
- Completed Certificate Course from Coursera (Institut Mines-Télécom, French) in Satellite Communications, 2018.
- Completed Certificate Course on "Digital Circuits" organized by NPTEL, IIT Kharagpur on July to October 2018.

Achievements and Awards:

• Received Certificate of appreciation in recognition of work done at SRM University, NCR Campus, Ghaziabad.

Memberships:

- Member, The Institution of Engineers (India), (Membership No: AM163141-4)
- Fellow, Institution of Electronics and Telecommunication Engineers (IETE), (Membership No: F503906)
- Member of Indian Society for Technical Education (ISTE) (Membership No: LM 93620)
- Member, International Association of Engineers (IAENG). (Membership No: 148653)
- Member, International Association of Computer Science and Information Technology (IACSIT) (Membership No: 80350236)