BIO-DATA

1. Name and full correspondence address: **Dr Bhavana Prakash Shrivastava**, Dept. of Electronics and Communication Engg. MANIT Bhopal

2. Email(s) and contact number(s): sonibhavana1@gmail.com +91 755- 4051518 ,9425635389

3. Institution: Maulana Azad National Institute of Technology, Bhopal

4. Date of Birth:16 th Oct, 1980

5. Gender :F

6. Category Gen/SC/ST/OBC : Gen.

7. Whether differently abled (Yes/No):No

8. Academic Qualification (Undergraduate Onwards)

	Degree	Year	Subject	University/Institution	% of marks
1.	B.E.	2003	Electronics and Communication Engineering	UIT,BU Bhopal	82.23%
2.	M. Tech.	2007	Digital Communication	MANIT, Bhopal	CGPA 10
3.	Ph.D.	2014	Electronics & Communication Engg. (Area-VLSI)	MANIT, Bhopal	Completed

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.
   Ph D thesis title : Design of improved routers for network on chip
   University/Institution; Maulana Azad National Institute of Technology, Bhopal
   Year of Award: 2014
10. Work experience (in chronological order).

Name of Employer	Designation	Nature of duties	Period		
			From	To	Years and Months
MANIT, Bhopal	Associate Professor	Teaching and Research	20 thDec 2023	Till date	
MANIT, Bhopal	Assistant Professor	Teaching and Research	15th July 2005	19 th Dec 2023	18 Years
MANIT, Bhopal	Lecturer Contract	Teaching	Jan2004	May 2005	1.4 years
UIT, Barkatullah University , Bhopal	Lecturer Contract	Teaching	Aug 2003	Dec 2003	4 months

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency	Year
1	Best Paper Award	Indian Society for VLSI education	July 2022

12. Publications *(List of papers published in SCI Journals, in year wise descending order).*

1. Alok Kumar, Tarun Kumar Gupta, Bhavana P Shrivastava, Abhinav Gupta," Noise Performance Evaluation of Recessed-Drain/Source Junctionless Gate-All-Around MOSFETs",in Journal of Electronic Materials,pp1-20 April 25 https://doi.org/10.1007/s11664-025-11928-1
2. Ajay Sharma, Bhavana P Shrivastava, Praveen Kumar Tyagi, Ebtasam Ahmad Siddiqui, Rahul Prasad, Swati Gautam, Pranshu Pranjal," Enhanced satellite image resolution with a residual network and correlation filter",in Chemometrics and Intelligent Laboratory Systems,pp105277,Vol 256 ,Jan 2025 https://doi.org/10.1016/j.chemolab.2024.105277

3. Alok Kumar, Tarun Kumar Gupta, Bhavana P Shrivastava, Abhinav Gupta Performance Improvement of Junctionless Gate All Around (JL-GAA) MOSFETs with Recessed Drain/Source (Re-D/S)" International Journal Of electronics', **Accepted**

4. Divya Gautam,Kavita Khare,Bhavana Prakash Shrivastava, "A novel guided box filter based on hybrid optimization for medical image denoising", Applied Sciences,Vol 13 issuse 12 ,pp-7032 , Available online 11 June 2023, https://doi.org/ 10.3390/app13127032

5. Ajay Sharma, Bhavana Prakash Shrivastava, Aayushi Priya, "Multilevel progressive recursive dilated networks with correlation filter (MPRDNCF) for image super-resolution", Multimedia Systems , Available online 10 April 2023, https://doi.org/10.1007/s00530-023-01126-6

6. Alok Kumar, Tarun Kumar Gupta, Bhavana P. Shrivastava, Abhinav Gupta, "Noise and linearity analysis of recessed-source/drain junctionless Gate All Around (Re-S/D-JL-GAA) MOSFETs for communication systems", Microelectronics Journal,volume 136,pp 1-7 Available online 10 April 2023 https://doi.org/10.1016/j.mejo.2023.105776

7. Alok Kumar, Tarun Kumar Gupta, Bhavana P. Shrivastava, Abhinav Gupta, " Impact of temperature variation on noise parameters and HCI degradation of Recessed Source/Drain Junctionless Gate All Around MOSFETs", Microelectronics Journal , Available online 14 February 2023, https://doi.org/10.1016/j.mejo.2023.105720

8. Ajay Sharma, Bhavana P Shrivastava, "Facial image super-resolution using progressive network interleaved correlation filter", Multimedia Tools and Applications pp.1-20 ,March 2023, https://doi.org/10.1007/s11042-023-14765-8

9. Ajay Sharma,Bhavana Prakash Shrivastava,"Different Techniques of Image SR Using Deep Learning "A Review",IEEE Sensors Journal ,Early access Dec 2022 https://doi:10.1109/JSEN.2022.3229046

10. Ajay Sharma,Bhavana Prakash Shrivastava,"Medical image super-resolution using correlation filter interleaved progressive convolution network (CFIPC)", Electronics Letters vol.58 issue 9, pp. 360–362, March 2022,

https://ietresearch.onlinelibrary.wiley.com/doi/epdf/10.1049/ell2.12467

11. Divya Gautam,Kavita Khare,Bhavana Prakash Shrivastava,"A Novel Approach for Optimal Design of Sample Rate Conversion Filter Using Linear Optimization Technique", IEEE access vol. 8, pp. 44436–44441, March 2021, https://doi:10.1109/ACCESS.2021.3066292

SCOPUS:

1.Tiwari, M.,Chaurasia, V.Shrivastava, B.P.,Kumre, L.,"Modified keeper controlled domino circuit for low power high performance wide fan in OR gates",International Journal of Engineering and Advanced Technology vol 8 issue 6, pp. 3121–3126,2019

2. Kumre, L., Shrivastava, B.P., Rai," Comparative analysis of cmos inverter for low leakage power ," International Journal of Scientific and Technology Research vol 8 issue 9, pp. 1598–1601 ,2019

LIST OF CONFERENCE

1. M Lakshmi mohana Ram,BP Shrivastava Arvind Rajawat," Easy signal generator to DDR2 with low access time" Third International conference on Internet on things and connected Technologies ICIoTCT 2018,pp 406-412
2. Ayushi Chaudhary, Bhavana P.Shrivastava, "low power D flip flop design for VLSI Application",Third International Conference on Internet of things and connected Technologies (ICIoTCT) 2018,pp 77-82
3. Abhishek chauhan, Bhavana P.Shrivastava,Laxmi kumre," Efficient of low power multiplexer using Adiabatic logic ,"9th International conference on"recent engineering and technology –icret - May 2019
4. Kri Kritika sahu, ,Laxmi Kumre, Bhavana P. Shrivastava," Optimization of schematic tiling technique using cadence skill code," 9th International conference on"recent engineering and technology –icret -may 2019
5. Bhavana P. Shrivastava," Dual Modulus Prescalar using low power D Flip Flops" Optimization of Schematic Tiling Technique using Cadence SKILL Code," 9th International conference on"recent engineering and technology –icret -May 2019
6. Ajay Sharma, Ayushi Priya, Bhavana P. Shrivastava,"Quantum Block chain: A Persuasive Approach for Future Security" IETE National Conference on VLSI, Communication and Signal Processing, 2021MANIT,Bhopal

7. Nidhi Singh, Bhavana P Shrivastava, Laxmi Kumre," Development of Verification Environment of I3C (Improved Inter Integrated Circuit) Slave Using System Verilog (UVM Methodology)", IETE National Conference on VLSI, Communication and Signal Processing, 2021MANIT,Bhopal

8. Akshay Anand , Bhavana P Shrivastava, Laxmi Kumre Physical Design of Complex Mixed Signal SoC Partition using UPF1.0, 8 th International Conference on Current Trends inAdvanced Computing - ICCTAC 2020 organized by the Department of Computer Science 6-7May 2020

9. Ayushi,Laxmi Kumre, Bhavana P Shrivastava ,"A Survey on I/Os: Its Aspects and Packaging", International Virtual Conference "Next Generation Education Technology for Science and Engineering" organized by IETE MP Chapter in association with IEEE MP Subsection, and The Institution of Engineers, India on Feb. 26-27, 2021

10. Abhijeet Bisht, Bhavana Prakash Shrivastava," Design of Multi Floor Multi-Elevator Controller by RISC-V CPU using Verilog-HDL", International Conference in virtual mode on "Advances in Electric Vehicle Technology" on 03rd Oct, 2021 organized by IETE MP Chapter in collaboration with Institution of Engineers, Gwalior Local Centre

11. Ajeet Kumar, Bhavana P. Shrivastava, Dheeraj K. Agarwal," A Review of Tunable Active RC Filter of Low Power For Bluetooth Application", International Conference in virtual mode on "Advances in Electric Vehicle Technology" on 03rd Oct, 2021 organized by IETE MP Chapter in collaboration with Institution of Engineers, Gwalior Local Centre

12. Ajay Sharma, Ayushi Priya, Bhavana P. Shrivastava," Quantum Block chain: A Persuasive Approach for Future Security," The Proceeding of IETE National Conference on "VLSI, Communication and Signal Processing" (NCVCS-2021) 27th to 28th November 2021,pp 17

13. Nidhi Singh, Bhavana P Shrivastava, Laxmi Kumre," Development of Verification Environment of I3C (Improved Inter Integrated Circuit) SlaveUsing System Verilog (UVM Methodology)," The Proceeding of IETE National Conference on "VLSI, Communication and Signal Processing" (NCVCS-2021) 27th to 28th November 2021,pp 47

14. Kundan Kumar, Kavita Khare, Bhavna P Srivastava, Rohit Goel,"CMOS Process Monitor Different Design Approaches",in the 7th International Conference on Microelectronics, Computing & Communication Systems (MCCS-2022) organized by ISVE July 9-10 2021

15. B. P. Shrivastava,,Shrrena Sachan "A noval low leakage power Reduction CMOS Design Techniques",Journal of harbin engineering university Elsvier scopus , vol 46 pp 59, 2025

16. B. P. Shrivastava,Shrrena Sachan,"CMOS design for restoring digital signal in pass transitor logic", prince dr.k.vasudevan college of engineering and Technology, chennai 2025
17.

Book Chapters:

1. Alok Kumar, Bhavana P. Shrivastava, Tarun Kumar Gupta, Vivek Patel, "Design an Inverter with a Quad-model Transistor", Circuit Design Approach for Modern Applications, pp1-21 CRC Press (ISBN 978-1-032-77431-2) in March 2025
2. Ajay Sharma,, Bhavana Shrivastava, and Swati Gautam , "A Review on Image Super-Resolution Using GAN /Meta-Learning Frameworks", Meta-Learning Frameworks for Imaging Applications,pp 12-31 IGI GLOBAL 2023 DOI: 10.4018/978-1-6684-7659-8.ch002
3. Swati Gautam, Ajay Sharma, Bhavana Prakash Shrivastava, "Critical Review Analysis on Deep Learning Based Segmentation Techniques for Water-body Extraction" Meta-Learning Frameworks for Imaging Applications,pp 153-168 IGI GLOBAL 2023 DOI: 10.4018/978-1-6684-7659-8.ch008
4. Vinay Kumar Pathak,Bhavana Prakash Shrivastava, Novel Deep Learning Framework for Arrhythmia Detection and Classification in Robotic-Assisted Cardiac Surgery", Deep Learning For Cardiac Signal Analysis In Robotic Applications,Campuzine ,Accepted

13 PhD. Dissertation Guided:

S.No.	Name of Student	Title of Ph.D Dissertation	Progress
1.	Divya Gautam	Design and implementation of efficient digital filters	Completed
2.	Ajay Sharma	Image Super Resolution using Deep Learning.	Completed
3.	Alok Kumar	Working on Low power devices	Completed

Details of Awards: Best Paper Award on paper Tittle " Signal Processing and Quantum Computing" from Indian Society for VLSI Education,Ranchi 2022

Detail of FDP organized:

Course	Title	Duration	Sponsored/Funded
Short term Training Programme	Advance VLSI Design and Embedded System	23/9/19 to 27/9/19	Atal
Short term Training Programme	IoT and its Application	9/12/19 to 13/12/19	Atal
FDP	Artificial Intelligence in Health care Applications	20 /5/2024 to 24/5/24	Self Sponsored
FDP	Artificial Intelligence in Health Care Applications II	16 thDec to 20 th Dec 2024	Self-sponsored
STTP	Digital and Analog IC Design using Cadence	1st July to 5 th July 2025	Self-sponsored

Details of Conference[s] Organized:

VLSI, Communication and Signal Processing (NCVCS 2021)	Organizing Secretary	27 Nov 2021 28 Nov 2021	Self Sponsored
National Conference on Women as Conservator and Propagator of Indian Knowledge Systems-Adi to Amrit Kaal "Stree 2024"	Organizing Secretary	MANIT,ECE6 th Dec to 8th Dec 2024	Funded by DST, Ayush

Academic and Administrative Work 1points

Department-level administration:

1. DUPC Convener 4 th year
2. Lab Incharge
3. Feedback Coordinator
4. Timetable incharge-PG
5. CR election coordinator of 2 year section 2

Institutional level administration:

1. Institute Professor Incharge **Telephone**
2. Stock verification member
3, Anti-ragging committee member
4. IBC -Cell Co-cordinator
5. Scrutiny Committee member in MSME Department
6. Flying Squad member in girls hotel 7 and 12
7. Faculty Co-coordinator of "Dristant" the Student Literary club in Maffick 24

Membership/ Fellowship in Professional Bodies

Name of the Professional Body	Membership Status (Life /Annual)
IEEE-96514339(Senior Member IEEE	Annual
CSI-3022240002	Life Time
IETE-M 501799	Life Time
ISTE- LM-130272	Life Time
IAENG-255669	Life Time
SDIWC-27348	Life Time