

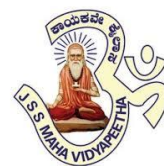


JSS Mahavidyapeetha

JSS Academy of Technical Education

Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060

Department: Electronics & Communication Engineering



FACULTY PROFILE

1. Personal Details

NAME	Mrs. Sunita Shirahatti	
DEPARTMENT	Electronics & Communication Engineering	
DESIGNATION	Assistant Professor	
PHONE	+91 89700 33400, +91 99803 03619	
EMAIL ID	sunithalshirahatti@jssateb.ac.in	
Date of Joining (JSSATEB)	27-07-2011	
Teaching Experience	23	
Industry	Nil	
Research	7	

2. Qualifications

COURSES	SPECIALIZATION	INSTITUTION	UNIVERSITY
Ph.D.	Digital Design	JSS Academy of Technical Education, Bengaluru	Visvesvaraya Technological University, Belgaum Karnataka
M.E. / M.Tech. / M.Sc.	VLSI Design & Embedded Systems	B V Bhoomaraddi College of Engineering & Technology, Hubli 580031 Karnataka INDIA	Visvesvaraya Technological University, Belgaum Karnataka
B.E. / M.Sc.,	Electronics & Communication	B V Bhoomaraddi College of Engineering & Technology, Hubli 580031 Karnataka INDIA	Karnatak University, Dharwad Karnataka
PUC	PCMB	P C Jabin College, Hubli 580031 Karnataka INDIA	Department of Pre-University Education, Government of Karnataka
SSLC		Lamington Girls High School, Hubli, Karnataka INDIA	Karnataka Secondary Education Examination Board

3. Membership of Professional Bodies:

1. Life Membership in Indian Society for Technical Education (MISTE)

4. Awards Received

Awards	Best Paper Award in ICATIECE - 2022 Dayananda Sagar Academy Of Technology And Management
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5. Publications (Journals & Conferences)

Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
	Prediction-Enabled Resource Allocation for Air Quality Monitoring using Temporal Convolutional Network-Based PM2.5 Forecasting Model in Cloud Datacenters	Thejaswini, P., Shirahatti, S., Gunasagari, G. S., Hongal, R. S., & Mattimani, R. S.	Journal of Circuits, Systems and Computers		Scopus WOS		
	Face Recognition System For Realtime Applications Using SVM Combined With FaceNet And MTCNN	GC Suguna, HS Kavitha, S Sunita, Sowmya R Bangari	IJEET	Volume 12, Year 2021, Pages 328-335			
1.	Fast and Accurate Prediction of Coronary Artery Disorder using Artificial Intelligence	Sunita Shirahatti, Sowmya R Bangari, Ahana Shetty	High Technology Letters	Volume:26 Issue: 10 Pages 962 – 970 October 2020	Scopus	2.7	HTL Journal
2.	An Improved Dictionary based Lossless Data Compression Technique	Sunita Shirahatti, Dr. Thejaswini P	Journal of Seybold report	Volume:15 Issue: 8 Pages August 2020	Scopus	0.11	Seybold report
3.	Performance Analysis of DES and Triple DES Algorithms	Shraddha P Tankasali, Sunita Shirahatti	International Research Journal of Engineering and Technology (IRJET)	Volume:7 Issue: 10 Pages: 766 - 772 October 2020		4.45	IRJET
4.	A Qualitative analysis of various adaptive Routing Algorithms	Kavyashree, saroja Busare Sunita shirahatti	International Research Journal of Engineering & Technology	ISSN : 2395-0056 Volume : 03 Issue : 05 Month & Year : May 2016		4.45	IRJET
5.	FPGA Implementation of Reversible Multiplier using K-Algorithm for Image Filtering Application	Kavya M, Sunita Shirahatti	International Journal of VLSI System Design and Communication Systems (IJVDCS)	ISSN : 2322-0929 Volume No. : 03 Issue : 03 June 2015		3.136	Blue Eyes Intelligence Engineering & Sciences Publication Pvt. Ltd.

Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Conference	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1	Performance Analysis of Vedic Multiplier using	Shirahatti, S, Haritha D, Thejaswini,	International Conference on Recent Advances in Science & Engineering	November 2024	Scopus		

	Kogge Stone Adder and Reversible Logic.	P,Deepika A J, & Yashaswini B M,.	Technology (ICRASET) IEEE.				
2	Performance Analysis of RNS Arithmetic Operations using Reversible Logic.	Shirahatti, S., Shettar, R., Hongal, R., & Malenahalli, U.	Fourth International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT)	December). In 2022 pp. 1-5	Scopus		
3	Communication Decipher: Text to Speech and Hand Gesture to Speech Conversion.	Bangari, S. R., Shirahatti, S., Veerabhadrapa, S. T., Suguna, G. C., & Kavitha, H. S	2022 Second International Conference on Advanced Technologies in Intelligent Control, Environment, Computing & Communication Engineering (ICATIECE)	December 2022, (pp. 1-6). IEEE	Scopus		
4	Automatic Detection of Musical Note Using Deep Learning Algorithms	Suguna, G. C., Shirahatti, S. L., Veerabhadrapa, S. T., Bangari, S. R., Jain, G. A., & Bhat, C. V	In Intelligent Communication Technologies and Virtual Mobile Networks: Proceedings of ICICV 2022	pp. 381-392 Singapore:	Scopus		Springer Nature Singapore.
5	Detection of Coronary artery disease using logistic regression	Ahana Shetty, Meghana S, deepali N M, Madhushree Sunita Shirahatti	10th International Conference on Recent Engineering & Technology, 2020	May 2020			Organization of Science and Innovative Engineering and Technology, India
6	Exploiting RNS and Reversible Logic to build MAC unit for power efficient Filtering in DSP	Sunita Shirahatti, Dr. rajashekhar Shettar	Third International Conference Electrical, Electronics, Communication, Computers and Optimization Techniques	14th – 15th December 2018			GSSS Mysore
7	Architectural Based Congestion Management for Network on Chip implemented on FPGA	Kavyashree, saroja Busare Sunita shirahatti	IEEE – 2 nd International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT - 2016)	https://doi.org/10.1109/ICATCCT.2016.7912004 2016	scopus		IEEE
8	Implementation of 32 bit Reversible Barrel shifter using SCRL gate	Rakesh M.B, sunita Shirahatti	National Conference on “VLSI, Signal and Image processing (NCVSIP-14)	22 nd - 23 rd August 2014.			JSS Academy of technical Education, Bangalore
9	Low Power Reversible Logarithmic Barrel shifter for MAC Applications	Rakesh M.B, Sunita Shirahatti	National Conference on Recent advances in Computer networks, NCRACN -2014	21 st and 22 nd March 2014			RNS Institute of Technology Bangalore, INDIA.
10	1.8V, 5mA Low Drop out Voltage Regulator referenced by a 1.1V curvature corrected Bandgap	Suita Shirahatti, Rohini Hongal Halesh M R	International conference on VLSI, Communication and Instrumentation [ICVCI-2011]	April 7th to 9 th , 2011 Pp – 686-691			IOSR Journals

	reference voltage						
11	Understanding linearity range of 1 GHz VCO with and without LDO	Rohini Hongal Halesh M R	International conference on VLSI, Communication and Instrumentation [ICVCI-2011]	April 7th to 9th, 2011 Pp – 692-697			IOSR Journals
12	A capacitor-less low drop out voltage regulator	Sunita Shirahatti Anil Nandi, Priyatam kumar	International conference on Communication Control and computing Technologies - ICCCT'10	pp 256-263 07-09 October, 2010	scopus		IEEE
13	<i>Column Decoder using PTL for Memory</i>	Sunita Shirahatti Rohini hongal Rohini korthi Anil Nandi	International conference on advanced Communication and Informatics - ICACI'2009	pp 9-14 11-13 January, 2009			
14	SRAM Memory design with optimized column decoder using PTL	Rohini hongal Rohini korthi Anil Nandi	National Level Technical Symposium PRAGATI-08, for PG/Research Students	18th October 2008			B. V. Bhomara di College of Engg. and Tech., Hubli

6. Grants/Funding Received :NIL

7. Others :Workshops / Conference (Orgained/Attended)

i. Workshops /Conferences Attended

1.	Two weeks Faculty Development Program on "Artificial Intelligence, Machine Learning and Data Science for Engineering Applications" from 2 nd to 11 th May 2024 sponsored by Ministry of Electronics and Information Technology, GOI organized by E & ICT Academy and SJBIT, Bengaluru
2.	Two day Faculty Development Program on "Sustainable Development Goals" from 28 th & 29 th June 2024 at JSSATE, Bangalore.
3.	1 week Faculty Development Program on "VLSI to System Design: Silicon to End Application Approach" from July 31 st to 4 th August 2023 organised by AICTE, ARM Education and STMicroelectronics.
4.	1 week Faculty Development Program on "Introduction to Python Programming and its Applications" from Feb 19 th to 23 rd , 2023 at VTU Centre for PG studies, VLAT, Muddenahalli, Chikkaballapura
5.	Student Development Program on "Image Processing Applications on FPGA" June 3 rd and 4 th 2022 at Dept. of ECE, JSS Academy of Technical Education, Bengaluru
6.	1 week Faculty Development Program on "Thrust areas in Artificial Intelligence: A Multidisciplinary Approach" from Feb 7 th Image Processing Applications on FPGA to Feb 11 th , 2022 at Dept. of ISE, JSS Academy of Technical Education, Bengaluru
7.	4-week Faculty Development Program on "Machine Learning for All" from Jan – Feb 2022, conducted by University of London
8.	2 weeks Short Term Training Program on "Connecting People to the Semiconductor Industry", from Feb 7 th to Feb 11 th 2022 at Dept. of ISE, JSS Academy of Technical Education, Bengaluru
9.	2 weeks Faculty Development Program on "VLSI Design Technology and Architectures for Biomedical Applications" Sep 5 th to 15 th Sep 2022 at Bangalore Institute of Technology, Bengaluru
10.	5 Days ATAL Faculty Development Program on "FPGA based deep Learning Application in Signal processing", KLE Technological University, Hubballi on 5/07/2021 to 9/7/2021
11.	5 Days ATAL Faculty Development Program on "Machine Learning Techniques in VLSI Design", M. S Ramaiah Institute of Technology, Bengaluru on 26/07/2021 to 30/7/2021
12.	International Conference (Online) (IC RTEETIMP-2020) on Recent Trends in Electrical, Electronics, Telecommunications, Instrumentation, Medical Electronics Engg. & Physics 7-9 December 2020 organized by Dayanand Sagar College of Engineering, Begaluru.
13.	10 th International Conference on Recent Engineering & Technology, 21 st June, 2020 organized by ORGANIZATION OF SCIENCE AND INNOVATIVE ENGINEERING & TECHNOLOGY (OSIET) Sponsored by IEEE – Product Safty

Engineering Society, New Horizon College of Engineering
14. Python Programming: A Concise Introduction, 12th May to 2020 TO 05-06-2020, (4 weeks) - COURSE ERA-WESLEYAN UNIVERSITY
15. Embedded System Design with ARM, Jan – April 2020 (8 weeks) – NPTEL
16. Faculty Development program on” LATEX “ at Dept. of CSE, Gopalan College of Engineering in association with Spoken Tutorial, IIT, Bombay , 17 th to 30 th April 2020
17. Hardware Modelling Using Verilog, Aug – Oct 2019 (12 weeks), NPTEL
18. 3 rd International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques on 14 th & 15 th December 2018 organized by GSSS Institute of Technology, Mysore
19. 5 Days Faculty Development Program on “Digital VLSi Testing” Dept. of ECE, APS College of Engineering, Bengaluru. 24 th to 28 th July 2018.
20. Linear Algebra and its Applications in computer Vision Department of Computer Science and Engineering, JSSATEB 13 th to 16 th July 2016
21. FDP on Advanced Embedded System development using ARM Processor Nitte Meenakshi Institute of Technology, Bengaluru 17 th to 20 th June 2015
22. Workshop on Train the Trainer JSSATE, Bengaluru 1 st to 6 th December 2014
23. FDP on Advanced Embedded System development using ARM Processor Nitte Meenakshi Institute of Technology, Bengaluru 17 th to 20 th June 2015
24. Workshop on Train the Trainer JSSATE, Bengaluru 1 st to 6 th December 2014

ii. Workshops / Conference (Organised)

Sl. No.	Name of the workshop / Conference	Organised by	Date	Role
1	“Vulnerabilities and Prevention in IC Design Phase”	IETE student Forum	12/06/2024	Coordinator
2	“Energy-efficient 2.5D Architectures for Machine Learning Applications and research avenues at IISC”	IETE student Forum	12/12/2023	Coordinator
3	“Two days workshop “	Internal Quality Assurance Cell (IQAC) and IETE Forum of E & C Department in association Indian Institute of Technology Guwahati	11th & 12th, July 2024.	Coordinator
4	Energy Efficient 2.5 D Architectures for Machine Learning Applications	IETE Student Chapter, ECE Department, JSSATEB	12/12/2023	Coordinator
5	Vega Processor and its Applications	IETE Student Chapter, ECE Department, JSSATEB	28/11/2023	Coordinator
6	Current Technologies & New avenues at IETE	IETE Student Chapter, ECE Department, JSSATEB	28/11/2023	Coordinator
7	Image Processing Applications on FPGA	ECE Department, JSSATEB in coordination with Union Instruments, Bengaluru	3 rd to 4 th June 2022	Coordinator
8	Student Development program on VEGA Processor	IETE Syudent Chapter, ECE Department, JSSATEB in coordination with CDAC, Trivandrum.	21 st & 22 nd October 2022	Coordinator
9	Project based Circuit Design and Simulation	By Sunita Shirahatti & Anuradha M G for 3 rd sem students, ECE Department	14 th & 15 th March 2022	Resource person & Coordinator
10	Pre-Placement talk on Carrier opportunities in Core Companies	ECE Department, JSSATEB		Coordinator

- iii. **Conference Attended (those sponsored by AICTE / ISTE /IETE /TEQIP or any other sponsoring body) - NIL**
iv. **6.d. PROJECT / Innovations/Patents: NIL**

8. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organised by	Date of completion / Award	Grade / Marks
1	Machine Learning for All	University of London	Jan – Feb 2022	100 %
2.	Python Programming – A Concise Introduction	Weslyan University	June 5 2020	100 %

3.	Embedded System Design with ARM	NPTEL, Bengaluru	16 th June 2020	88 %
4.	Hardware modelling using Verilog	NPTEL, Bengaluru	Aug – Oct 2019	Gold / 93 %

9. Any other information you will like to share about your professional experience : NIL

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