




JSS Mahavidyapeetha
JSS Academy of Technical Education
Department Electronics & Communication Engineering
www.jssaten.ac.in



FACULTY PROFILE

Department: Electronics & Communication Engineering

1. Personal Details

NAME	Dr. Shivaji Sinha	
DEPARTMENT	Electronics & Communication Engineering	
DESIGNATION	Assistant Professor-III	
PHONE	09716981568	
EMAIL ID	shivaji.sinha@jssaten.ac.in	
Date of Joining (JSSATEN)	01/10/2003	

2. Experience

Total Experience	Teaching: 20 years	Industry: NIL	Research: 03 Years
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3. Qualifications

COURSES	SPECIALIZATION	YEAR	INSTITUTION	UNIVERSITY
B.E.	Electronics & Communication	2003	G B Pant Institute of Engineering and Technology, Pauri, Garhwal, Uttarakhand	H N Bahuguna Central University, Uttarakhand
M. Tech.	VLSI Design	2011	G C E T, Greater Noida, Gautam Buddh Nagar	Dr A.P.J Abdul Kalam Technical University (Formerly GBTU), Lucknow
Ph.D.	Free Space Optics	2024	School of USICT	Guru Gobind Singh Indraprastha University, New Delhi

4. Research & Publications

Papers Published in Web of Science indexed Journals	09
Papers Published in SCOPUS indexed Journals	05
Papers Published in other Journals	02
Papers Presented in Conferences / Symposium	17
	1. Name of the book: FPGA Implementation of LMMSE detection for MIMO OFDM System Publisher: VDM Verlag Dr. Muller, Germany Year of Publication:2011 2. Name of the Work Online resource for GATE, PSUs for the Subject Electromagnetic Field Theory

	Publisher: Online Resources of Oxford University Press, New Delhi for the Year of Publication: 2010 3. Shivaji Sinha et al., “ Wireless Body Area Networks:- A Review with Intelligent Sensor Network-based Emerging Technology ” in Proceeding of Advances in Intelligent and Soft Computing (ASIC Series), Springer 2015, vol. 339, pp. 813-821.
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5. Research Guidance

PhD Guide? Give field & University		
PhDs / Projects Guided	Ph.D. Awarded: Guiding:	Projects at Master's Level: 02 Projects at Bachelor's Level: 60

6. Patents

Sl. No.	Title Details	Details of award of patent / Filed
1.	Design of Smart Wireless Charging system for electric vehicles using WPT Technology	Application No: 202121007129 A Date of Publication: 26/02/2021
2.	Real-Time AI-Enabled Health Monitoring in Io Wearable Devices	Application No: 202311054345 A Publication: 08/09/2023

7. Awards Received

Award	Details
Topper in U P Board	District Topper in High School Board examination. & Scholarship holder
Best Faculty Award	Best teaching certification from the Principal of JSS Academy of Technical Education, Noida based on student feedback for a course taught in 2017-18.
Best Faculty Award	Best teaching certification from the Principal of JSS Academy of Technical Education, Noida based on student feedback for a course taught in 2007-08.

8. International Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1.	Performance Comparison of 2×120 OAM Polarized Hybrid Multiplexed FSO System in Heavy Rain and Wet-Snow Weather Conditions	Shivaji Sinha and Chakresh Kumar	Wireless Personal Communication	vol. 133, pp. 2411-2426, 2024	WoS. Scopus	1.8	Springer
2.	Performance evaluation of UAV-assisted FSO link in generalized Malaga distributed atmospheric turbulence conditions	Shivaji Sinha & Chakresh Kumar	Optical and Quantum Electronics	vol. 55, pp. 1161, 2023.	WoS.	2.794	Springer
3.	Simulative Investigation of the Hybrid, Spatially Multiplexed MIMO-FSO Transmission System Under Atmospheric Turbulence	Shivaji Sinha <i>et al</i>		vol. 11, pp. 55071-55080, 2023.	WoS.	3.9	IEEE Access

4.	Capacity Enhancement Analysis of an OAM-OFDM-SMM Multiplexed Free Space Communication System in Atmospheric Turbulence	Shivaji Sinha <i>et al</i>	Applied Science	vol. 13, No. 6, 2023	WoS	2.7	MDPI
5.	Performance Analysis of a DPSK-based High-Speed Spectral-Efficient FSO System under Different Weather Conditions	Shivaji Sinha & Chakresh Kumar	Journal of Scientific and Industrial Research	vol. 82, No. 06, 2023.	WoS, Scopus	1.056	CSIR
6.	Evaluation of high-speed hybrid OAM-OFDM-MDM multiplexed coherent FSO system under desert conditions	Shivaji Sinha and Chakresh Kumar	Optica Applicata,	vol. 53, No. 3, pp. 431-445, 2023.		0.6	
7.	Performance investigation of 2×20 Gb/s MDM-RoFSO link incorporating spiral-phased Hermite-Gaussian modes under strong weather conditions	Shivaji Sinha & Chakresh Kumar	Journal of Optics	vol. 52, pp. 1962-1975, 2022.	WoS	1.8	Springer
8.	Simulative Investigation of MIMO-OFDM-FSOC System over Modified Malaga Distributed Composite Atmospheric Channel	Shivaji Sinha and Chakresh Kumar	Journal of Scientific and Industrial Research	vol. 83, No. 02, pp. 191-203, 2024.	WoS, Scopus	1.056	CSIR
9.	Multi-Objective ANT Lion Optimization Algorithm Based Mutant Test Case Selection for Regression Testing	Aprna Tripathi, Shilpa Srivastava Himani Mittal, Shivaji Sinha, Vikash Yadav	Journal of Scientific and Industrial Research (JSIR)	vol. 80, pp. 582-592	WoS, Scopus	1.056	CSIR
10.	Error Performance of an STC WCDMA System on a frequency selective MIMO Fading channel	Sinha S., Kansal A	International Journal of Advances in Electrical and Electronics Engineering (IJAEED)	Vol. 1, No. 2, pp. 79-86 2012	ISSN: 2319-1112	-	-
11.	Wavelet and FFT Based BER Analysis for Multicarrier Communication	Sinha S., Kumar C	Journal of Telecommunication (JOT) U.K	Volume 18, Issue 2, February 2013 ISSN: 2042-8839	-	-	-

9. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Conference	Vol No. Issue No. Year	WOS / Scopus	Publisher
1.	Energy Detection of Unknown Signals over Rayleigh Fading Channels	Sinha S, Mehruz S., Urooj S	Issues and Challenges in Intelligent Computing Techniques (ICIT-14), KIET,	pp. 303 – 307, 07-08 Feb 14	Scopus	IEEE

2.	Wireless Body Area Networks:- A Review with Intelligent Sensor Network based Emerging Technology	Mehfuz S., Urooj S., Sinha S	Information Systems Design and Application-2015 (INDIA 2015)	vol. 339, 21 Jan 2015	Scopus	Springer
3.	Evolutionary Algorithm Based Self-Reconfigurable e Adaptable Systems for Image Processing: A Survey of Progress	Prasada Kumari.K.S, Sampath Kumar. V, Shivaji Sinha	ICRIE-2016	Jan 2016.	ISBN:978-93-5254-986-3 pp 96-100	Science Direct
4.	VLSI Systems Energy Management from a software Perspective- A Literature survey	Prasada Kumari.K.S, Sampath Kumar. V, Shivaji Sinha	International conference on Recent trends on engineering and material sciences (ICEMS-2016)	Vol. 8, pp 611-613, Sept 2016		Science direct
5.	Performance comparison of channel estimation techniques using OFDM	Shivaji Sinha & Dinesh Chandra	Conference on sixty years of the transistor and its impact	22-24 Oct 09		Aurora's Technological and Research Institute, Hyderabad
6.	Comparison of different QAM modulation schemes in OFDM system	Shivaji Sinha	National Conference on Information Management in Knowledge Economy	20th March 2010		Macmillan Publishing India Limited, New Delhi
7.	Analytical Evaluation of BPSK, QAM-4 & QAM-16 modulation schemes in OFDM system	Shivaji Sinha	National Conference on Information Sciences	23 & 24 April 2010 ISBN NO: 023-032-936-5 page No: 102-107		Guru Govind Singh Indraprastha University, Delhi
8.	Performance Analysis of Sub Carrier Spacing Offset in Orthogonal Frequency Division Multiplexing System"	Shivaji Sinha, Dinesh Chandra	National Conference on Signal Processing and Real Time Operating Systems (SPROTOS-11)	March 26-27 2011 at		H.B.T.I. Kanpur
9.	Implementation of IEEE 802.16e OFDM Physical Baseband layer	Shivaji Sinha, Nitin Jain	National Conference on Advances in wireless cellular Telecommunication: Technologies & Services	4-15 April 2011		Institute of Communication Engineers & Information Technologies, New Delhi.
10.	Performance Analysis of Flat Fading Channel with & without Equalization	Shivaji Sinha	National Conference on Quality Improvement Tools in Dynamic Market Scenario	May 6 - 7, 2010	-	Business School, New Delhi.

11.	A Novel Approach for Performance Comparison of Flat Fading and Frequency Selective Fading Channel uses Image Processing	Shivaji Sinha, Lalit Kumar	National Conference on Emerging Technologies in Electrical Engineering (NCEEE-2010)	June 11-12, 2010)	-	Adam's Engineering College, Khammam, Andhra Pradesh
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10. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Human values & Professional Ethics	Indian Institute of Technology (IIT) Kanpur,	May 21-27, 2009.
2	Recent Trend in Wireless Communication	AICTE & Galgotia University, Greater Noida	2 July 2012 to 15 July 2012
3	Wireless LAN's	AICTE & (NITTTR), Chandigarh	30 July 2012 to 4 August 2012
4	Signals and Systems	MHRD & IIT Kharagpur & IIT Mumbai	2 Dec to 12 Dec 2014.
5	Machine Learning and its application	ICT Electronics and ICT Academy and IIT Roorkee	4 May-14 May 2020
6	Outcome based Education: A step towards excellence	AICTE, & Government Engineering College Karad	11-15 May 2020
7	Machine Learning and Deep Learning Applications in Engineering & Science	TEQUIP-III, Government Engineering College Karad and Rajkiya Engineering College Azamgarh	16 May- 20 Mat 2020
8	SCILAB	Spoken Tutorial IIT Bombay and JNTU, Hyderabad	25 May – 30 May 2020
9	Next Generation Software tools and trends for industrial solution	TEQUIP III, Government Engineering College, Aurangabad	13 June- 17 June 2020
10	Big Data and Hadoop	AICTE & IPS Academy Institute of Engineering and Science, M.P	20th -25th July, 2020
11	Recent Research Trends in Electronics and Communication Engineering	TEQIP-II, G B Institute of Engineering and Technology, Pauri Garhwal	18 August 028 August 2020.
12.	Teaching Learning Pedagogies	AICTE(AQIS), A G Patil polytechnic, Sholapur	7th to 12 th September 2020
13.	Advancements in Signal Processing and Optimization Techniques in WSN.	TEQIP-III, Rajasthan Technical University, Kota	21 Sept-25 Sept 2020
14.	Artificial Intelligence and 5 G Communication Technology	AICTE(AQIS), Poornima College of Engineering , Jaipur	7th to 12 th September 2020
15	Recent Trends in Beyond 5G in WSN	TEQIP-III, Ujjain Engineering College, M.P.	19 - 23 September 2020

11. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
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1	12 th IEEE International Conference INDICON	Deptt of Electrical Engineering, Jamia Millia Islamia Central University, Delhi.	17-20 December 2015	Organizer
2.	Next Generation Wireless Networks and Standard	Deptt of Electronics Engineering, JSS Academy of Technical Education, Noida	29 Feb to 5th March 2016	Organizer
3.	Online FDP on PYTHON	Spoken Tutorial IIT Bombay and Department of ECE JSSATE, Noida	22 nd June – 04 July 2020	Organizer

12. Membership of Professional Bodies:

1. IEEE-92987405
2. ISTE- LM 78192
3. IETE-212139 M
4. IAENG-121458
5. AMIE- AM099753-9
6. ICEIT-1100213 L
7. IACSIT-80345113
8. CSTA-4803139

Dr. Shivaji Sinha

Assistant Professor III

Department of Electronics & Communication Engineering

JSS Academy of Technical Education, Noida