

Somaiya Vidyavihar University

Name: Swati Sandeep Mahajan		E-mail: swatimahajan@somaiya.edu	
Contact No: 02266449314			
Department/Section: Department of Electronics & Telecommunication Engineering			
College: K J Somaiya School of Engineering			
DOJ Somaiya: 01/07/2005	Career Experience: 32.5 Yrs	Industry Experience: 1.5 Yrs	Teaching Experience: 31 Yrs
Present Academic Designation: Assistant Professor		Present Administrative Designation:-	

Area of research/specialization and Courses Delivered
Research domain/interests/areas Wireless Communications, Networking Courses Delivered Digital Communication, Mobile And Wireless Communications, Basic Electronic Circuits, Analog Electronics, Digital Telephony, Satellite Communication, Digital Telephony, Networks and Application

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : No
Details of Recognitions Details of Recognitions 1. Somaiya Vidyavihar University 2. University of Mumbai			

Education					
Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
PG	M.E.	Rajiv Gandhi Technical University, M.P.	S.G.S.I.T.S., Indore	2002	Distinction
UG	B. E.	Nagpur University	Y. C. College of Engineering, Nagpur	1990	First Class

Notable Experience Details					
Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	K. J. Somaiya College of Engineering	Assistant Professor	July 2005	Till Date	20 Years
2.	Konkan Gyanpeeth College of Engineering, Karjat	Assistant Professor	August 2002	June 2005	2 Yrs 11 Months
3.	Konkan Gyanpeeth College of Engineering, Karjat	Lecturer	Sept 1997	July 2002	4 Yrs 10 Months
4.	S. D. Meghe Polytechnic, Nagpur	Lecturer	Dec 1994	Aug 1997	2 years 6 Months

Research Accomplishments and Projects		
No of students completed PG thesis / Project work as on date: 11		No of students / groups completed UG projects as on date: 35 +
Publications Total:21	Number of Peer review Journal papers:07	Number of Conference papers: 14

Details of Publications:

National Journals

1. Kunal Mahajan, Avinash Shinde, Swati Mahajan, "Simulation of Indoor Visible Light Communication System" in International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169, Volume: 5 Issue: 3, March 2017
2. Avinash Shinde, Kunal Mahajan, Swati Mahajan, "Data Transmission using Visible Light Communication: Experimental Approach" in International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169, Volume: 5 Issue: 3, March 2017
3. Supriya Parandkar, Swati Mahajan, "Algorithm to Construct LBMIS for Probabilistic Wireless Sensor Networks" in International Journal of Information Systems, ISSN: 2229-5429, Vol: V, Issue: II, January - May 2015
4. Gangotri Khiratkar, Swati Mahajan, "Performance Analysis of Cluster Based Routing Protocol for Ad hoc Networks" in International Journal of Computer Sciences and Engineering (IJCSE), E-ISSN: 2347-2693 Volume 2, Issue 04, April 2014
5. Rujuta Pawar, Swati Mahajan, "Performance Analysis of Wireless Sensor Network Using Cognitive Radio Concept" in International Journal of Computer Sciences and Engineering (IJCSE), E-ISSN: 2347-2693 Volume 2, Issue 04, April 2014
6. Archana, Swati Mahajan, "SUPPRESSION OF INTERFERENCE IN ULTRA WIDE BAND SRAKE RECEIVERS USING IMPULSE RESPONSE" in International Journal of Advanced Research in Electronics and communication Engineering (IJARECE), ISSN: 2278 – 909X, Volume 2, Issue 12, December 2013
7. Vaishali Mangrulkar, Swati Mahajan, "ANALYSIS OF ENERGY AND LIFE-TIME USING ENERGY EFFICIENT ROUTING PROTOCOL IN WIRELESS SENSOR NETWORK" in International Journal of Electronics, communication & Soft Computing Science and Engineering, ISSN: 2277-9477, Volume 2, Issue2 , August 2012

Conferences

International Conference

1. Swati Mahajan, Anita Diwakar, Amey Gawade, Kartik Patel, & Ruchira Jadhav, "IMPROVISATION OF CIRCUIT DESIGN AND ANALYSIS SKILLS OF STUDENTS FOR ANALOG ELECTRONICS COURSE USING VIRTUAL LABS", in International Conference on Computers in Education. Philippines: Asia-Pacific Society for Computers in Education, November 26–30, 2018
<https://apsce.net/icce/icce2018/wp-content/uploads/2018/12/C7-18.pdf>
2. Sudha Gupta, Ravindra Salvi, Deepak Sharma, Sonali Patil, Bharathi H.N, Swati Mahajan, Manoj Palsodkar, "NEED BASED STUDENTS" SCHOLARSHIP: PUSH KJSCE-A SUCCESS STORY" in Journal of Engineering Education Transformations, Volume 33, January 2020, Special issue, eISSN 2394-1707 Year: 2020, Volume: 33, Issue: Special Issue, Pages: 275-279
<https://sciresol.s3.us-east-2.amazonaws.com/srs-j/jeet/pdf/volume33/specialissue/JEET789.pdf>
3. Swati Mahajan, Sangeeta Kulkarni, Anita Diwakar, "A PILOT STUDY: THE EFFECT OF USING VIRTUAL LABORATORY ON STUDENTS' CONCEPTUAL UNDERSTANDING IN MOBILE COMMUNICATIONS", in the 8th IEEE international conference on Technology for Education, held at IIT, Bombay 2-4 December 2016
4. Anuja Muddalkar, Swati Mahajan, "SECURE DATA DISSEMINATION IN WIRELESS SENSOR NETWORKS", in International conference on "Industrial Electronics and Electrical Engineering" (ICIEEE-Pune) in Association with Institute of Research and Journals held at Pune on 22nd March 2015.
5. Archana, Swati Mahajan, "OVERVIEW OF IMPULSE BASED UWB TRANSMITTER RECEIVER" at International conference on "Recent advances and Challenges in Engineering and management (RACEM-13)" in collaboration with IEEE Bombay Section organised by Vidyalankar Institute of Technology, Wadala, on 11th, 12th Jan, 2013

Somaiya Vidyavihar University

6. Swati Mahajan, Sharvari Deshmane, Shalu Upadhyay, "UPLINK SCHEDULING FOR FIXED BROADBAND WIRELESS ACCESS SYSTEMS" at International Conference on Emerging Technologies in Telecommunication Convergence (ICETT-07) Organized by The Institute of Electronics Telecommunication Engineers(IETE), Mumbai Centre Jan 10-12, 2007
7. Swati Mahajan, Sharvari Deshmane, Shalu Upadhyay, "PERFORMANCE ANALYSIS OF SELF CANCELLATION TECHNIQUE IN OFDM SYSTEM" at PCEA – IFTOMM International Conference (PICA 2006) on "Recent Trends in Automation & its Adaptation to Industries" jointly organized by Priyadarshini College of Engineering & Architecture, Nagpur, India and International Federation for the Promotion of Mechanisms & Machine Sciences July 11 – 14, 2006

National Conference

1. Kalpesh R. Malpani, Swati Mahajan, "Comparative Analysis of Estimation of Carrier Frequency Offset Methods in OFDM system", in the National Conference on Innovations and Advancement in Information Technology, SIES Nerul, Feb 20,2016.
2. Chirag K. Kapadia, Swathi Mahajan, "Different Peak to average Power Ratio (PAPR) Reduction Techniques for OFDM system", in the National Conference on Innovations and Advancement in Information Technology, SIES Nerul, Feb 20,2016.
3. Vaishali Mangrulkar, Swati Mahajan, "ROUTING PROTOCOL IN WIRELESS SENSOR NETWORK-A COMPARISON", in the National conference on Communication, Antenna and Signal Processing(CASP) Cynosure-2011 at B.A.T.U. , Lonere on 23-24 December 2011
4. Swati Mahajan , Sharvari Deshmane, Shalu Upadhyay, "IEEE STANDARD 802.16: A TECHNICAL OVERVIEW OF THE WIRELESSMAN MEDIUM ACCESS CONTROL (MAC) LAYER" at National Conference on UTKARSH – Technology for Society Transformation Organized by Vivekanand Education Society's Institute of Technology, Mumbai Jan 12-13, 2007
5. Swati Mahajan, Sharvari Deshmane, Shalu Upadhyay, "WORLDWIDE INTEROPERABILITY USING OFDM", at National Conference On Information and Communication Technology (NCICT – 2006) Recent Trends and Future Challenges organized by D. J. Sanghvi College of Engineering, Mumbai. Feb 24-26, 2006.
6. Swati Mahajan, Sharvari Deshmane, Shalu Upadhyay, "DISCRETE MULTI-TONE FOR DSL" at National Conference On Trends in Telecom Transmission: Copper to Fiber organized by IEEE-Bombay section, IETE-Mumbai Centre, IEI Maharashtra State Centre And K. J. Somaiya College of Engineering, Mumbai, March 17-18, 2006
7. Swati Mahajan, Dr M. B. Lele, "ROLE OF INFORMATION TECHNOLOGY IN TECHNICAL EDUCATION" at National Conference On Technical Education in the New Millennium Management and Challenges organized by University College of Engineering, Usmania University, Hyderabad in association with Commissionerate of Technical Education and ISTE, March 12-13, 2000

No of Research / consultancy / projects completed:
Rs:

No of Research / consultancy / projects on-going:
Rs:

No of Research / consultancy / projects on applied as on date:
Rs:

Details of Research / consultancy / projects:
Completed

1. Solar PV Systems

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

Attended

- 1.

Organized

1. Coordinator, Design Lecture series, Organized by department of Electronics and

Somaiya Vidyavihar University

Telecommunication, 2007	
2. Organized Workshop on , “Stress Management and Rational Thinking”, July 2009	
3. Organized Guest Lecture: Visual Presentation Skills on 14 Sept., 2017	
4. Development of Virtual experiments in 'Digital Communications' domain, 2021	
5. Organized Circuit Simulation Workshop” for Students in 2020, 2021, 2022	
Delivered	
1. Webinar on “Transformations at KJSCE using Opportunities with IIT Bombay” along with Ms. Avani Sakhpara, Mrs Arati Phadke on Wednesday Oct 16, 2019 at 4:30 pm IST	

Notable Key Scholastic Achievements	
1.	Former, Head of Department for Electronics & Telecommunication Engineering: from 18 June 2011 - 7 November 2013
2.	Former. Associate Head of Department of Electronics & Telecommunication Engineering: from 1 July 2009 - 18 June 2011

Date: 11 / 08 / 2025

Swati Mahajan