

BIO-DATA

Name: Sushama Subodh Agrawal

Designation: Associate Professor

Experience: 32 Years

Educational Qualifications: Ph D (Electronics Engineering)

Member of Professional Bodies: ISTE



Reviewer of following Conferences:

1. International Conference on Industrial Instrumentation & Control 2015 (ICIC 2015)
2. International Conference on Computing and Network Communications (CoCoNet'15)
3. International Conference on Communication, Information & Computing Technology, 2021 (IIC ICT-2021)
4. International Conference on Communication Systems 2023 (ICOCS – 2023)

Publications:

International Journal Papers:

1. P. S. Kurhe, S. S. Agrawal. "Real Time Tracking & Health Monitoring System of Remote Soldier Using Arm7", *International Journal of Engineering Trends and Technology (IJETT)*, V4 (3):311-315 Mar 2013. ISSN: 2231-5381.
2. Rahate Kunal B., Dr. A.S. Bhalchandra, S.S. Agrawal, "VLSI Implementation of Digital Image Watermarking", *International Journal of Engineering Research and Technology*, ISSN:2278-0181, Vol. 2, Issue 6 (June -2013)
3. K.M. Khatri, V.R. Ratnaparkhe, S.S. Agrawal, A.S. Bhalchandra, "Image Processing Approach for Malarial Parasite Identification", *International Journal of Computer Applications Proceedings on National Conference on Growth of Technologies in Electronics, Telecomm and Computers -India's Perception*, GTETC-IP: 5-7, May 2014
4. K.M. Khatri, S.S. Agrawal, "Implementation of Discrete Cosine Transform using VLSI", *International Journal of Engineering Research and Technology*, ISSN: 2278-0181, Vol. 3, Issue 4, April 2014
5. Samadhan Rupnar, S.S. Agrawal, "Watermarking in YCbCr Channel using Xilinx System Generator", *International Journal of Engineering and Management Research*, Vol 5, Issue 3, Page Number: 586-592, June 15 ISSN (Online): 2250-0758
6. Mohammad Moiz, S.S. Agrawal, "Character Recognition System using Xilinx System Generator", *International Journal of Engineering and Management Research*, June 15, ISSN (Online): 2250-0758
7. Priyanka Darkunde, S.S. Agrawal, "FPGA Implementation of CT/MRI Image Fusion using Lifting-based Discrete Wavelet Transform", *International Journal of Engineering and Management Research*, June 15, ISSN (Online): 2250-0758

8. Komal Ramne, S.S. Agrawal, "Statistical Methods to detect Counterfeit Indian Currency", *International Journal of Scientific & Engineering Research*, ISSN 2229-5518, Vol 9, Issue 6, June-2018
9. Nupur Somwanshi, S.S. Agrawal, "Enhanced Attendance System Using Intensity Normalization, Face Alignment and LBPH", *International Journal of Scientific & Technology Research*, Vol 8, No. 9, Sept 2019, 2306-2311
10. Sushama Agrawal and Anjali Bhalchandra, "Robust Imperceptible Gray Image Watermarking with LWT, SVD and QR Decomposition," *International Journal of Computer Theory and Engineering* vol. 14, no. 3, pp. 89-96, 2022
11. Agrawal Sushama and Bhalchandra Anjali, "Firefly optimized robust, imperceptible, secure watermarking scheme," *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 28,no.2,p.1155,Nov. 2022, doi:10.11591/ijeecs.v28.i2.pp1155-1163

International Conference:

1. Mohammad Bagwan, S S Agrawal, "FPGA Implementation of DWT/IDWT for Image Compression", *International Conference on Advancements in Engineering and Management, (RITS ICAEM-2012)*, Royal Institute of Technology & Science, Hyderabad, India, 28-29 Feb 2012
2. Rahate Kunal B., Dr. A.S. Bhalchandra, S.S. Agrawal, "Hardware Implementation of Digital Image Watermarking Using VLSI Platform", *International Conference on VLSI and Signal Processing (ICVSP) 10-12 Jan 2014*
3. Priyanka Darkunde, S.S. Agrawal, "Memory Efficient Architectures for 2-D lifting based discrete wavelet transform: A Survey", *International Conference on Industrial Instrumentation and Control*, 28-30 May 2015
4. Rohini Shete, S.S. Agrawal, "IoT Based Urban Climate Monitoring using Raspberry Pi", *International Conference on Communication and Signal Processing*, 1667-1671, IEEE Xplore. April 6-8, 2016
5. Radhika Kabra, S.S. Agrawal, "Robust Embedding of Image Watermark using LWT and SVD", *International Conference on Communication and Signal Processing*, 1642-1646, IEEE Xplore, April 6-8, 2016
6. Shruti Dande, S.S. Agrawal, S.R. Hirekhan, "Implementation of Colour Image steganography using LSB and Edge Detection Technique: A Labview Approach", *International Conference on Communication and Signal Processing*, 1198-1202, IEEE Xplore, April 6-8, 2016
7. Ashvini Kapgate, S.S. Agrawal, "Edge Based Data Embedding Steganography algorithm using Zed Board", *IEEE International Conference on Recent Trends in Electronics Information Communication Technology*, India, May 19-20, 2017
8. Mansi Kothari, S.S. Agrawal, "PolyAniline/Poly N-Methyl Pyrrole Copolymer for detection of volatile organic compounds", *International Conference on Advanced Materials Development & Performance AMDP 2017*, July 11-15, 2017
9. Pravin Borude, S.S. Agrawal, "Low Power 16-T CMOS Full Adder Design", *International Conference on Intelligent Computing and Control Systems*, June14-15,2018, ISBN:978-1-5386-2842-3
10. Swapnil Pimple, Gayatri Uttarwar, Nikita Patil, Nishigandha Bhagunde, S.S. Agrawal, "Cost Effective Stand-alone Parking Assistance System", *3rd International Conferences on Trends in Electronics and Informatics (ICOEI 2019)*

11. Ashish Kamble, S.S. Agrawal, "Wavelet Based Digital Image Watermarking Algorithm Based on Fractal Images", *International Conference on Electronics and Communication and Aerospace Technology*, 12-14 June 2019, IEEE Xplore ISBN: 978-1-7281-0167-5

National Conference:

1. Komal Khatri, V.R.Ratnaparkhe, S.S.Agrawal, A.S.Bhalchandra, "Image Processing approach for Malarial Parasite identification", *National Conference Growth of Technologies in Electronics, Computers and Telecom: Indian Perception - GTECT-2013 Mumbai, Maharashtra, India , 28 & 29 Sept 2013.*

Short Term Training Programme Organized:

1. STTP of one week on System Design using FPGA (Under TEQIP II)
2. STTP of one week on Signal & Image Processing (Under TEQIP II)
3. Employability Skills Enhancement Training Programme for final year engineering for batches passed out in 2018, 2019 and 2020.

Expert Lectures Presented:

1. "Interrupts", Deogiri Engineering College, Aurangabad
2. "Arm Processor", NIELIT Aurangabad
3. Subject External Expert Member of Selection Committee to select Senior Project Faculty in Embedded/VLSI at NIELIT, Aurangabad
4. Selection Committee member as External Expert Member for selection of senior faculty at NIELIT, Aurangabad

Short Term Training Programmes Participated:

1. Soft Computing Tools & its Applications in Engineering (20.06.2011 to 01.07.2011), Government College of Engineering, Aurangabad
2. Skill Matrix Enhancement and effective Teaching-learning for quality Technical Education, (28.11.2011 to 09.12.2011), Government College of Engineering, Aurangabad
3. Engineering Optimization Techniques and its application in Research, (02.01.2012 to 12.01.2012), Government College of Engineering, Aurangabad
4. Engineering Optimization and its application, (25.06.12 to 29.06.12), Government College of Engineering, Aurangabad
5. Self-Management and Team Management for Success Breaking the Barriers (18.09.2012), Government College of Engineering, Aurangabad
6. Genetic Algorithm and Neuro Fuzzy Applications in Engineering, (17.12.2012 to 21.12.2012), Government College of Engineering, Aurangabad
7. Ashling Based Real Time Embedded Development System on ARM Processor, (16.01.2013 & 17.01.2013), Government Polytechnic, Nashik
8. System Design using FPGA, (24.06.2013 to 28.06.2013), Government College of Engineering, Aurangabad
9. MSP 430 and its application and ASD with ASLKv2010 Starter kit, (20.09.13 to

- 24.09.13), Government College of Engineering, Aurangabad
10. Network Security, (07.10.2013 to 11.10.2013), Government College of Engineering, Aurangabad
 11. Work Life Balance, (05.12.2014), Government College of Engineering, Aurangabad
 12. Outcome Based Accreditation, (03.02.2014 & 22 to 24.02.2014), Government College of Engineering, Aurangabad
 13. Embedded System Design Flow Using Vivado, (10/12/2014 & 11/12/14), VJTI Mumbai
 14. Outcome Based Education & NBA, (31.01.2015 & 01.02.2015), Government College of Engineering, Aurangabad
 15. Pedagogy to Synergogy, (07.12.2015 to 11.12.2015), Government College of Engineering, Aurangabad
 16. Advances in Digital Signal Processing, (03 and 04 Dec 2015), Government College of Engineering, Aurangabad
 17. Wavelet Theory, (12.04.2016 and 13.04.2016), Government College of Engineering, Aurangabad
 18. FPGA based Digital System Design with Application: Learning by doing, (20.06.16 to 25.06.16), Deogiri Institute of Engineering and Management Studies, Aurangabad
 19. CMOS MIXED SIGNAL AND RADIO FREQUENCY VLSI DESIGN, (30.01.2017 to 04.02.2017), IIT Kharagpur, Remote Center Marathwada Institute of Technology, Aurangabad
 20. Signal & Image Processing 2017, (06.02.2017 to 10.02.2017), Government College of Engineering, Aurangabad
 21. 3D Printing: A Disruptive Technology of this era, (20.02.2017 to 22.02.2017), Government College of Engineering, Aurangabad
 22. Optimization in Machine Learning, (27.02.2017 to 03.03.2017), Government College of Engineering, Aurangabad
 23. Recent Trends in Electromagnetic, RF and Radar Signal Processing, (11.06.18 to 15.06.2018), Government College of Engineering, Aurangabad
 24. Training the Trainers for the Course: Engineering Exploration, (03.08.2018 to 07.08.2018), Government College of Engineering, Aurangabad
 25. Python programming for image processing, (19.09.2018 to 23.09.2018), Government College of Engineering, Aurangabad
 26. Outcome based education with assessment and evaluation, (21.01.2019 to 25.01.2019), Government College of Engineering, Aurangabad
 27. NPTEL course: Introduction to Research, Term ODD 18-19, Eight weeks, Online Course of NPTEL
 28. NPTEL course: Outcome based pedagogic principles for effective teaching, Term ODD 18-19, Four weeks, Online Course of NPTEL
 29. NPTEL Course: Embedded System Design with ARM, Term EVEN 18-19, Eight weeks, Online Course of NPTEL
 30. Digital Transformation in Teaching Learning Process, (6.04.2020 to 22.04.2020), IIT Bombay, TEQIP Online Certification
 31. Signal, Image & Video Processing: A Practical Approach, (26.05.2020 to 30.05.2020), Government College of Engineering, Karad
 32. Image Processing and Data Science with MATLAB, (07.07.2020 to 11.07.2020), Government College of Engineering, Aurangabad
 33. Experience Design: Design Thinking for Educators in the New Normal, (24.08.2020 to 26.08.2020), Government College of Engineering, Aurangabad
 34. Linear Algebra and Statistics for Engineers and Scientists (LA & SES -2020),(02.09.2020 to 06.09.2020), Government College of Engineering, Aurangabad

35. Image Processing Using VLSI Architectures, (17.12.2020 to 21.12.2020), IIT Roorkee
36. Professional Development Training Programme, (11.01.2021 to 13.01.2021), IIM, Vishakhapatnam
37. FDP on NAAC: AQAR Submission in the revised format, (01.02.2021 to 06.02.2021), Rashtriya Uchcharat Shiksha Abhiyan (RUSA)
38. Indian Patent filing Procedure, Specification, Search, (10.03.21), Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM), Nagpu
39. Accelerating Project-based Learning using Internet of Things and ThingSpeak, (18.06.21 to 19.06.21), Regional Research Symposium on PBL 2021
40. Innovation Incubation & Research Challenges in India, (21.06.21 to 25.06.21), Department of ECE in association with IIC, IEDC & IETE cells of IES College of Engineering, Thrissur
41. Artificial Intelligence and Machine Learning, (08.03.22 to 12.03.22), Government College of Engineering, Avasari (Kh.)
42. Product development and Analysis, (21.02. 22 to 25.02.22) Government College of Engineering, Aurangabad

Any other information: Recipient for Best Maharashtra Polytechnic Teacher, for 2010-11,
from Engineering Education Foundation, Pune