Name of Teaching Staff Designation Department Date of Joining the Institution Email ID	: : : : :	Dr. Satishkumar Chavan Associate Professor Electronics & Telecommunication Engineering 01.02.2024 satishkumar.chavan[at]djsce.ac.in	
Google Scholar Link	:	Satishkumar Chavan Google Scholar	
Researchgate Link:		Satishkumar Chavan ResearchGate	
ORCID		0000-0003-2137-8849	
Publons Researcher ID (Web of Science)		AAH-1453-2019	
Vidwan ID		216792	
Qualifications with Class / Grade	:	**Ph.D. (Electronics & Telecomm. Engg.)** - April 2018 SGGS Institute of Engineering and Technology, Nanded affiliated to Swamy Ramanad Teerth Marathwada University, Vishnupuri –431606, Nanded, Maharashtra, India. **Area of Specialization**: Biomedical Image Processing **Title of Thesis**: Medical Image Analysis (Multimodality Medical Image Fusion) **M.Tech. (Electronics & Telecomm. Engg.) -** June 2004 - **72.18 % First Class with Distinction** Dr. Babasaheb Ambedkar Technological University, Lonere- 402103, Raigad, Maharashtra, India. **Area of Specialization**: Image Processing **Title of Thesis**: Image Compression using Embedded ZeroTree Wavelet (EZW) **B.E. (Electronics Engg.)** June 1998 – **66.93% First Class with Distinction** Shivaji University, Kolhapur, Maharashtra, India. **BE Project:** Smart Controller (8255 Interface with PC and controlling various parameters like teamprature, pressure, humidity)	
Total Experience in Years	:	**Teaching: 24 years** 1. Associate Professor (Electronics & Telecomm.): February 2024 to till date, D. J. Sanghvi College of Engineering, Vile Parle, Mumbai 2. Associate Professor (Electronics & Telecomm.): July 2018 to January 2024 (5 Years 6 Months), Don Bosco Institute of Technology (DBIT), Kurla (W), Mumbai 3. Assistant Professor (Electronics & Telecomm): July 2006 to June 2018 (12 Years), Don Bosco Institute of Technology (DBIT), Kurla(W), Mumbai 4. Lecturer (Electronics & Telecomm): March 2004 to June 2006 (2 Years 3 Months), Don Bosco Institute of Technology, Kurla (W), Mumbai 5. Lecturer (Electronics & Telecomm): August 2001- May 2002 (1 Academic Year), VP's Institute of Technology, Baramati, Pune. 6. Lecturer (Industrial Electronics): September 1999–August 2001 (2 Years), SVPM's Institute of Technology and Engineering, Malegaon Bk., Baramati, Pune. 7. Lecturer (Electronics): September 1998 – May 1999 (1 Academic Year), Sahyadri Polytechnic, Sawarde, Chiplun, Ratnagiri.	

Papers Published in Journal:	:	1. Satishkumar Chavan, Leeaa Nair, Nishikant Nimbalkar, and Sarah Solkar, "Karyotyping of human chromosomes in metaphase images using faster RCNN and Inception models," International Journal of Imaging Systems and Technology, Wiley Publication, 2024. DOI: 10.1002/ima.23041 **(Accepted)** 2. Rishikesh G Tambe, Sanjay N Talbar, Satishkumar S Chavan, "Deep multi-feature learning architecture for water body segmentation from satellite images," Journal of Visual Communication and Image Representation, Elsevier, vol. 77, pp. 1031-1041, May 2021. https://doi.org/10.1016/j.jvcir.2021.103141 3. Rishikesh G. Tambe, Sanjay N. Talbar, and Satishkumar Chavan, "Satellite image fusion using undecimated rotated wavelet transform," International Journal of Computational Science and Engineering, Inderscience, vol. 24, no. 2, pp. 171-184, May 2021. https://doi.org/10.1504/IJCSE.2021.115103 4. Rishikesh G Tambe, Sanjay N Talbar, Satishkumar S Chavan, "Fusion of Multispectral and Panchromatic Images by Integrating Standard PCA with Rotated Wavelet Transform," Journal of the Indian Society of Remote Sensing, Springer, India, vol.49, pp. 2033-2055, April 2021. https://doi.org/10.1007/s12524-021-01373-y 5. Praful Hambarde, Sanjay Talbar, Abhishek Mahajan, Satishkumar Chavan, Meenakshi Thakur, and Nilesh Sable, "Prostate lesion segmentation in MR images using radiomics based deeply supervised U-Net," Biocybernetics and Biomedical Engineering, Elsevier, vol. 40, No. 4, pp. 1421-1435, 2020. https://doi.org/10.1016/j.bbe.2020.07.011 6. Praful Hambarde, Sanjay N. Talbar, Nilesh Sable, Abhishek Mahajan, Satishkumar S. Chavan, and Meenakshi Thakur, "Radiomics for peripheral zone and intra-prostatic urethra segmentation in MR imaging," Biomedical Signal Processing and Control, Elsevier, vol. 51, pp. 19-29, 2019. https://doi.org/10.1016/j.bspc.2019.01.024 7. Satishkumar Chavan, Abhijit Pawar, and Sanjay Talbar, “Multimodality Medical Image Fusion using Nonsubsampled Rotated Wavelet Transform for Cancer Treatment,” Int. J. of Computational Systems Engineering, Inderscience, vol. 4, no. 2/3, pp. 96-105, April 2018. https://doi.org/10.1504/IJCSYSE.2018.091389 8. Satishkumar S. Chavan, Abhishek Mahajan, Sanjay N. Talbar, Subhash Desai, Meenakshi Thakur, and Anil D'cruz, "Nonsubsampled rotated complex wavelet transform (NSRCxWT) for medical image fusion related to clinical aspects in neurocysticercosis," Computers in Biology and Medicine, Elsevier, vol. 81, pp. 64-78, 2017 (Impact Factor: 2.115) (Selected as a meritorious paper of 2017). https://doi.org/10.1016/j.compbiomed.2016.12.006 9. Satishkumar S. Chavan and Sanjay N. Talbar, “Multimodality Medical Image Fusion using M-Band Wavelet and Daubechies Complex Wavelet Transform for Radiation Therapy,” IGI Global - International Journal of Rough Sets and Data Analysis, vol. 2, no. 2, pp. 01-23, July 2015. Indexed in ACM Digital Library. https://doi.org/10.4018/IJRSDA.2015070101 10. Sagar Soman, Mitali Ghorpade, Vrushali Sonone, and Satish Chavan, “Content Based Image Retrieval using Advanced Color and Texture Features,” International Journal of Computer Applications (IJCA), International Conference in Computational Intelligence (ICCIA2012), no. 9, pp. 10-14, March 2012. https://www.ijcaonline.org/proceedings/iccia/number9/5155-1067 **11.** Aditi Agarwal, Ruchika Bhadana, and Satishkumar Chavan, “A robust video watermarking scheme using DWT and DCT,” International Journal of Computer Science and Information Technologies (IJCSIT), vol. 2, no. 4, pp. 1711 - 1716, 2011. http://www.ijcsit.com/ijcsit-v2issue4.php

Papers Presented in Conferences	:	1. Sunantha Guruswamy, Bobby Sharma, Nilesh Sable, Chirag Nooh Kurane, Satishkumar Chavan, "A system for feature extraction and classification of ovarian CT radiology reports," **IEEE** 6th International Conference on Advances in Science and Technology (ICAST 2023), Mumbai (**Accepted**) 2. Shubhangi Katariyar, Pradnya Tendolkar, Satishkumar Chavan, Sunantha Krishnan, Shubham Shinde, Nilesh Sable, "Survival prediction in renal cell carcinoma patients using machine learning," **IEEE** 6th International Conference on Advances in Science and Technology (ICAST 2023), Mumbai (**Accepted**) 3. Abhishek Tripathi, Shafaque Shaikh, Elton Noronha, Sagar Kote, Pratibha Dumane, and Satishkumar Chavan, "Sustainable Development Assessment of South Asian Countries Using Fuzzy Logic," Proceedings of the 4th International Conference on Advanced Technologies for Societal Applications — Volume 1 (Techno-societal 2022), **Springer**, Cham, Chapter 29, pp. 261-269, September 2023, ISBN 978-3-031-34643-9. DOI: https://doi.org/10.1007/978-3-031-34644-6_29 4. Vaibhav Parate, Arka Dey, Manas Bhandarkar, Saadiya Dafedar, Satishkumar Chavan, "Age Progression and Regression using cycleGAN," IEEE 3rd Global Conference for Advancement in Technology (GCAT 2022), Banglore, India, pp. 1-6, **IEEE**, 2022. DOI: https://doi.org/10.1109/GCAT55367.2022.9972089 5. Abhiram Pillai, Amaan Nizam, Minita Joshee, Anne Pinto, and Satishkumar Chavan, "Breast Cancer Detection in Mammograms using Deep Learning," In Applied Information Processing Systems, vol 1354, pp. 121-127. **Springer**, Singapore, 2022. https://doi.org/10.1007/978-981-16-2008-9_11 6. Jolae Gomes, Hayden Fernandes, Stefan Abraham, Satishkumar Chavan, "Person identification based on voice recognition," 4th Biennial International Conference on Nascent Technologies in Engineering (ICNTE), pp. 1-5, **IEEE**, 2021. https://doi.org/10.1109/ICNTE51185.2021.9487756 7. Sumantu Powale, Abhijeet Dhanawade, Siddhesh Bagwe, Shreyas Kawale, Nitin L. Chutke, and Satishkumar Chavan, "Person identification in low resolution CCTV footage using deep learning," 2nd International Conference on Advances in Computing, Communication Control and Networking (ICACCCN), pp. 236-240. **IEEE**, 2020. https://doi.org/10.1109/ICACCCN51052.2020.9362764 8. Lyona, Christy, Joyce Menezes, Tushar Shinde, Mayura Gavhane, Ragini M. Rohatgi, and Satishkumar Chavan, "Classification of retinal images in stages of diabetic retinopathy using deep learning," 2nd International Conference on Advances in Computing, Communication Control and Networking (ICACCCN), pp. 228-231, **IEEE**, 2020. https://doi.org/10.1109/ICACCCN51052.2020.9362913 9. Pratibha Dumane, Bilal Hungund, and Satishkumar Chavan, "Dysarthria Detection Using Convolutional Neural Network," Techno-Societal 2020, **Springer**, Cham, pp. 449-457, May 2021. https://doi.org/10.1007/978-3-030-69921-5_45 10. Satishkumar S. Chavan and Satishkumar L. Varma. "Vehicle Number Plate Recognition for Toll System," In Next Generation Information Processing System, pp. 178-186. **Springer**, Singapore, 2020. https://doi.org/10.1007/978-981-15-4851-2_19 11. Satishkumar Varma, Megha Shinde, and Satishkumar S. Chavan. "Analysis of PCA and LDA Features for Facial Expression Recognition Using SVM and HMM Classifiers," In Techno-Societal 2018, pp. 109-119, **Springer**, Cham, 2020. https://doi.org/10.1007/978-3-030-16848-3_11 12. Satishkumar L. Varma and Satishkumar S. Chavan, "Detection of Malaria Parasite Based on Thick and Thin Blood Smear Images Using Local Binary Pattern," In Computing, Communication and Signal Processing, pp. 967-975. **Springer**, Singapore, 2019. https://doi.org/10.1007/978-981-13-1513-8_98

		13. Rochelle D'Sa, Kelvin Lewis, Jovita Pereira, Vicky Thomas, and Satishkumar Chavan, "Comparative Analysis of Lung Segmentation," **Elsevier** SSRN (May 17, 2019) (2019). https://dx.doi.org/10.2139/ssrn.3424473 14. Pratibha R. Dumane, Anuja D. Sarate, and Satishkumar S. Chavan, "Sustainability Assessment by Use of Fuzzy Logic—A Review," In Computing, Communication and Signal Processing, pp. 363-370. **Springer**, Singapore, 2019. https://doi.org/10.1007/978-981-13-1513-8_38 15. Satishkumar S. Chavan, Carl Fernandes, Pratibha R. Dumane, and Satishkumar L. Varma. "Design and Implementation of Automatic Coin Dispensing Machine," In ICCCE 2019: Proceedings of the 2nd International Conference on Communications and Cyber Physical Engineering, vol. 570, pp. 379-385, **Springer**, 2019. https://doi.org/10.1007/978-981-13-8715-9_46 16. Sanjay N. Talbar, Satishkumar S. Chavan, and Abhijit Pawar, "Non-subsampled Complex Wavelet Transform Based Medical Image Fusion," In Proceedings of the Future Technologies Conference, pp. 548-556. **Springer**, Cham, 2018. https://doi.org/10.1007/978-3-030-02686-8_41
Area of Specialization		✓ Signal and Image Processing, ✓ Computer Vision, ✓ Medical Image Analysis, ✓ Biomedical Signal Processing, ✓ Speech Processing, ✓ Machine Learning, ✓ Deep Learning
Reviewer of Journals	:	▪ IEEE Transaction on Medical Imaging ▪ Springer Signal, Image and Video Processing ▪ Elsevier Computers in Biology and Medicine ▪ Elsevier Signal Processing: Image Communication ▪ Elsevier Biomedical Signal Processing and Control ▪ Elsevier Internet of Things ▪ Elsevier: Informatics in Medicine Unlocked ▪ Elsevier: PLOS one ▪ Wiley International Journal of Imaging Systems and Technology (IMA)
Professional Memberships	:	▪ Institution of Electronics and Telecommunication Engineers (IETE): Life Member ▪ Computer Society of India (CSI): Life Member ▪ Association of Medical Physics of India (AMPI): Life Member ▪ Indian Society for Technical Education (ISTE): Life Member ▪ Association for Computing Machinery (ACM): Member ▪ National Digital Library of India (NDLI) : Member
Interaction with Professional Institutions: Guest Lectures:		1. A Talk on "Underwater image enhancement using deep learning," in AICTE ATAL one week FDP on Recent trends in Underwater signal, image and video processing at Ramrao Adik Institute of Technology, D.Y. Patil Deemed to be University, Nerul, Navi Mumbai (5 December, 2023) 2. A Talk on "Intellectual Property Rights (IPR) and Patenting" for Third Year Students of Computer Science & Engineering at SVERI's College of Engineering, Pandharpur, Dist. Solapur (15 October, 2023). 3. A session on "Applications of Feature Engineering" for Third Year Students of Electronics and Telecommunication Engineering at SVERI's College of Engineering, Pandharpur, Dist. Solapur (14 October, 2023). 4. Talk on "Applications of DSP in Medical Field" at SVERI's College of Engineering, Pandharpur, Dist. Solapur (11 September, 2023). 5. Talk on "Biomedical Image Processing Applications in Healthcare," in ISTE Approved One Week Online Faculty Development Program on AI Algorithms and Applications in Healthcare organized by Finolex Academy of Management & Technology, Ratnagiri (22 June, 2023) 6. Talk on "Medical Image Analysis using Deep Learning" in STTP on "Signal Processing using Machine Learning Algorithms" at Ramrao Adik Institute of Technology, D.Y. Patil Deemed to be University, Nerul, Navi Mumbai (5 January, 2023)

		7. Talk on "Applications of Machine Learning and Deep Learning in Computer Vision" for TE EXTC Students of St. Xavier's Institute of Technology, Mahim, Mumbai (24 February, 2022) 8. Talk on "Latex for Project Report Writing" for SE EXTC III 2021-22 Batch of Don Bosco Institute of Technology, Mumbai (26 November, 2021) 9. Talk on "Latex for Technical Paper and Project Report Writing" for BE EXTC VII 2021-22 Batch of Don Bosco Institute of Technology, Mumbai (07 August, 2021) 10. Talk on "Digital Image Compression" for TE EXTC Students of St. Xavier's Institute of Technology, Mahim, Mumbai (12 April, 2021) 11. Talk on "Writing Reports/Thesis in LaTeX" in Online One Week Workshop (5 Days) on Writing Documents in LaTeX conducted by Pillai College of Engineering, New Panvel (30 April, 2020). 12. Talk on "LaTex – A documentation system" for BE IT students under Technical Skill Development Programme at DBIT Mumbai (1 Oct. 2018) 13. Talk on "Medical Applications with Image Processing" at K.J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai (26 September, 2018). 14. Talk on "Become an expert in writing a Journal Paper" at SVERI's College of Engineering, Pandharpur Dist. Solapur (21 September, 2018). 15. Hands-on session on "Scilab – A Free and Open Source Software" in AICTE and ISTE approved one week STTP on Open Source Technologies for Engineering Education at DBIT, Mumbai (4 January, 2018).
Books reviewed	:	1. S Jayaraman, S Esakkirajan, T Veerakumar, "Digital Image Processing," Tata McGraw Hill Education, 2009 2. Signal and Systems, Narosa Publication, 2010 3. Digital Signal Processing, Tata McGraw Hill Publication, 2009
Interaction with Professional Institutions		1. Evaluator for PhD Research Progress at D.Y. Patil University's Ramrao Adik Institute of Technology, Navi Mumbai. 2. Evaluator for PhD Research Progress at Pillai College of Engineering, Navi Mumbai. 3. Research collaboration with Tata Memorial Hospital, Parel, Mumbai 4. Session Chair in the conference "6th IEEE-International Conference on Advances in Science and Technology (ICAST2023)" held at K. J. Somaiya Institute of Engineering and Information Technology, Mumbai on 8-9 December, 2023 5. Session Chair in the conference "5th IEEE-International Conference on Advances in Science and Technology" held at K. J. Somaiya Institute of Engineering and Information Technology, Mumbai on 2-3 December, 2022 6. Session Chair in the 4th International Conference on Advanced Technologies for Societal Applications (Techno-Societal 2022) held at SVERI's College of Engineering, Pandharpur on December 9-10, 2022 7. Track Chair for Intelligent System and Machine Vision in the 7th International Conference on Computing in Engineering & Technology (ICCET 2022) held at Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad, Maharashtra, India on February 22-23, 2022 8. Member of Syllabus Setting Committee for subject Discrete Time Signal Processing (TE EXTC V), University of Mumbai 2020 (R-2019 C-Scheme) 9. Member of Syllabus Setting Committee for subject Image Processing (BE ECE VII), University of Mumbai 2022 (R-2019 C-Scheme)
Grants fetched	:	1. Principal Investigator of Minor Research project titled "Person Identification using face in low resolution CCTV and speech". Received Minor Research Grant of Rs. 25000/- from University of Mumbai (AY 2019-20). 2. Principal Investigator of Minor Research project titled "Design and Implementation of Customized FPGA Board". Received Minor Research Grant of Rs. 27000/- from University of Mumbai (AY 2016-17). 3. Co-Investigator of project titled "3D Printer". Received Minor Research Grant of Rs. 40,000/- from University of Mumbai (AY 2015-16).

Subjects Taught		**UG Level:** 1. Signals and Systems 2. Discrete Time Signal Processing 3. Image Processing and Machine Vision 4. Electronics Devices and Circuits **PG Level** 1. Modern Digital Signal Processing 2. Computer Vision
Projects Guided	:	**UG Level:** 1. Face recognition for class attendance system 2. Performance Assessment of Machine Learning Models for Early Prediction of Chronic Kidney Disease 3. Multiobject detection and analysis with different sensors 4. MRI based classification and segmentation of Brain tumour using deep learning approach 5. Person Identification using voice recognition 6. Automated Karyotyping using Deep Learning and Image Processing 7. Person Identification using low resolution CCTV footage 8. Lung Nodule Detection 9. Detection and Classification of Microcracks in Solar Panels 10. Iris Recognition **PG Level:** 1. Prostate lesion detection and segmentation 2. Survival analysis in clear cell renal cell carcinoma using CT images
Recommended Students for Higher Education		1. Minita Joshee – University of Arizona, Eller College of Management, Arizona 2. Riddhi Sharma – Auckland University of Technology, New Zealand 3. Swapnesh Joseph – Georgia Institute of Technology, Singapore 4. Ishita Somwanshi - The University of Manchester, England 5. Alan Vaz - University of Southern California, Los Angeles, CA 6. Loveena Lucia Stephen - Lakehead University, Canada 7. Radhika Bhangaonkar - Santa Clara University 8. Arundhati Tambe - The University of Texas at Dallas 9. Neha Ram - Carnegie Mellon University, Pittsburgh, PA 10. Monty Fernandes - George Mason University
Institute/Department Responsibility handled:		➢ Dean of Academics (DBIT Mumbai): July 2018 –Jan 2024 ➢ SPOC for NPTEL at DBIT (February 2019 – January 2024) ➢ Program Coordinator, DBIT Nodel Centre for Outreach Programme by ISRO-IRIS (October 2020 – January 2024) ➢ Head of Department (Information Technology) at DBIT: January 2011 – June 2013, DBIT, Mumbai ➢ Head of Department (Electronics &Telecomm) at DBIT: July 2008 – June 2009, DBIT, Mumbai ➢ Department Coordinator (Electronics &Telecomm): July 2007 – June 2008, DBIT, Mumbai ➢ CSI Student Branch Counsellor at DBIT, Mumbai from April 1, 2012 to March 31, 2014. ➢ IEEE Student Branch Counsellor at DBIT, Mumbai from January 1, 2005 to December 31, 2010.
Pedagogy Development		✓ Peer Learning ✓ Hybrid Classroom ✓ Flip Classroom ✓ Student Mentors