Name of Teaching Staff	:	Prof. Sunil H. Karamchandani	
Designation	:	Associate Professor	
Department	:	Electronics & Telecommunication Engineering	
Date of Joining the Institution	:	1.8.2012	
Email ID	:	sunil.karamchandani@djsce.ac.in	
Office Contact	:	022-42331231	
Google Scholar Link	:	https://scholar.google.co.in/citations?user=Szlmxe8AAAAJ&hl=en	
Research gate Link:		https://www.researchgate.net/profile/Sunil-Karamchandani	
ORCID		0000-0001-6607-1440	
Publons Researcher ID		https://publons.com/researcher/3095327/sunil-karamchandani/	
Qualifications with Class / Grade	:	1. Ph.D. in Electrical Engineering from IIT Bombay on Topic "*tuPOY: Thermally Unstable Intelligent Textiles through Polymerization and Esterification for Sensing and Radiating Applications.*" 2. M.E. – Electronics & Telecommunication Engineering from University of Mumbai in September, 2002 , 1st class with Distinction 70%. 3. B.E. (Electronics & Telecomm. Engineering) from University of Mumbai in June 1992.	

Total Experience in Years	Teaching: 15 years :	1. Assistant Professor, D.J. Sanghvi College of Engineering from 1.8.2012 to till date. 2. Visiting Professor, Mumbai University Watumull Institute of Electronics Engineering & Computer Technology, (BSc.Tech, BE) 2002-2004 H.M Institute of Management, 2007 K. M. Kundnani College of Pharmacy, 2005 3. Lecturer, MSBTE Bombay Institute of Technology, 1993 – *2007*
	Industry:	1. Subject Matter Expert (SME) Manipal Global Education Services, Bengaluru Area, India Design, develop and present Technical Course Content for Sikkim Manipal University for Electronics, Electronics & Telecommunications and Computer based subjects in accordance with their prescribed syllabus and requirements. The course and curriculum design is interactive, contemporary and in and in sync with the industry requirements. 2. Expert- Technical Video Based Content Learning, 2016 Manipal Global Education Services, Bengaluru Area, India Video Content Delivery for Electronics, Electronics & Telecommunications and Computer Courses
	Research:	Research Associate, 2011-2012 Indian Institute of Technology, Bombay *Project*: India UK Advance Technology Centre (IUATC) Excellence in Next Generation Network Systems and Services Teaching Associate, 2008 – 2011 Department of Electrical Engineering, IIT Bombay *Subjects:* VLSI Design, Digital Design, Introduction to Electrical and Electronic Circuits *Labs:* Digital Communication, Digital Signal Processing
Papers Published in Journal:		D. Joshi, F. Sayed, A. Saraf, A. Sutaria, S. Karamchandani, Elements of Nature Optimized into Smart Energy Grids using Machine Learning. Design Engineering (05), pp. 1886 – 1892, 2021 Retrieved from https://thedesignengineering.com/index.php/DE/article/view/1892 D. Joshi, A. Parikh, R. Mangla F. Sayed, S. Karamchandani, AI Based Nose for Trace of Churn in Assessment of Captive Customers, 1102 Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 6, June 2021: 1102-1108,2021 A. Khambatia, K. Pinto, D. Joshi, S. Karamchandani, Innovative Smart Water Management System Using Artificial Intelligence, "Turkish Journal of Computer and Mathematics Education" Vol.12 No. 3(2021), 4726-4734. *Monograph*: Advanced Structured Materials, Springer, 2016. *tuPOY: Thermally Unstable Partially Oriented Yarns Silicon of the Future* *Book Chapter: Advances in Intelligent Systems and Computing, Springer 2013* Multiclass SVM Interpretation of Haemodynamic Parameters for manifestation of Aortic and Arterial Occlusive Diseases.

	Editors: Valentina Emilia Balas, János Fodor, Annamária R. Várkonyi-Kóczy, Joszef Dombi, Budapest Hungary. *Neural Information Processing, Lecture Notes in Computer Science, Springer 2012* Parallel Support Vector Configuration for Identification of Fast Independent Components in Morphological Patterns Derived by Cardiovasographic Analysis on the Radial Pulse Editors: T. Huang, Z. Zeng, C. Li, C Sing Leung Proceedings of the IEEE, 100 (11): 3079-3098 (2012). tuPOY: Epitomizing a New Epoch in Communications with Polymer Textiles Sensors and Actuators B: Chemical, Elsevier vol. 156, no. 2, (2011), pp. 765-772. Thermally unstable intelligent polymer textile biosensors.
Papers Presented in Conferences	S. Karamchandani, S. Bhattacharjee, D. Issrani R. Dhar SLAM using Neural Network-based Depth Estimation for Auto Vehicle Parking, 5th International Conference on ICT for Intelligent Systems (ICTIS – 2021), Springer SIST.ISSN Number - 2190-3018. Karamchandani S., Shukla, Ganesh et al. "Holistic Siamese Model Optimized for Aged Face-Sketch Similarity Detection." 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON) (2020): 763-768. Sunil Karamchandani, Ganesh Shukla, "Appraisal of Feature Based and Holistic Interpretations of Face Sketch-Image Dichotomy for Criminal Detection", 4th International Conference on Information and Communication Technology for Intelligent Systems: Proceedings of ICTIS, 15th-16th May 2020. Pistolwala S.T., Thakar P.T., Karamchandani S.H. (2020) Non-invasive Carotid Artery Pulse Monitoring System. In: Vasudevan H., Gajic Z., Deshmukh A. (eds) Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, vol 36. Springer, Singapore Dalmet W., Das A., Dhuri V., Khaja M., Karamchandani S.H. (2020) Siamese Manhattan LSTM Implementation for Predicting Text Similarity and Grading of Student Test Papers. In: Vasudevan H., Gajic Z., Deshmukh A. (eds) Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, vol 36. Springer, Singapore Doshi M., Desai A., Fafadia M., Doshi M., Karamchandani S.H. (2020) Design and Analysis of Single and Multi-core Antennas for Underwater Sensing. In: Vasudevan H., Gajic Z., Deshmukh A. (eds) Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, vol 36. Springer, Singapore. S. Karamchandani, S. Subramaniam, V. Chheda, "Introduction to SARL", European Forum for the SARL Users and Developers - EuSarlCon19, May 2, 2019, Leuven, Belgium. A. Shah, S. Karamchandani, Unsupervised Manoeuvring Robot for Scouring Application, IEEE 5th I2CT 2019 Pune, 29, 31st March 2019 Sunil Karamchandani, "Feature Extraction for the Prediction of Mental Health Using Decision Tree", First International Symposium on Computer Vision and Machine

Intelligence in Medical Image Analysis (ISCMM-2019), IEEE Xplore ISBN: 978-1-5386- 7989-0

M Doshi, C. Fafadia, S. Gandhi, S. Karamchandani, Cellulose Acetate Substrates for Design and Calibration of Strain Gauges in Angle Measurement. In: Vasudevan H., Deshmukh A., Ray K. (eds) Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, vol 19. Springer, Singapore.

A. Garge, S. Karamchandani, S.Suhasaria Segmentation Techniques for Differential Variations in Fingerprint Images, In: Vasudevan H., Deshmukh A., Ray K. (eds) Proceedings of International Conference on Wireless Communication. Lecture Notes on Data Engineering and Communications Technologies, vol 19. Springer, Singapore.

A. Garge, S. Karamchandani, Z. Saquib, Performance Comparison Of Orientation Sensitive Filters For Low Quality Fingerprints, 4th International Conference On Signal Processing, Computing And Control (ISPCC- Springer), JUIT, September 2017.

S. Karamchandani, P. Matondkar, S. Iyer, N. Gori, Score Formulation and Parametric Synthesis of Musical track as a platform for Big Data in Hit Prediction, First International Conference on Advanced Computational and Communication Paradigms, (ICACCP-Springer) to be held at SMIT, Sikkim, Sept, 2017.

A.Garge, S. Karamchandani, Z. Saquib, Performance Evaluation Of Variable And Modified Gabor Kernels for Filtering of Fingerprint Images, The Eight International Conference On Computing, Communication And Networking Technologies (ICCCNT), IIT Delhi, July 2017.

S. Karamchandani, A. Mehta, Y. Parekh, Performance Evaluation of Machine Learning and Deep Learning Techniques for Sentiment Analysis, 4th International Conference on Information System Design and Intelligent Applications, (INDIA - 2017), Duy Tan University, Da Nang, Vietnam, 15th - 17th, June, 2017.

S. Karamchandani, A. Gondhalekar, A. Alandikar, Vision Based Shooting Simulator, IEEE 11th INDIACOMM, 4th International Conference on Computing for Sustainable Global Development, BVICAM, New Delhi, March 2017.

Area of Specialization	Signal, Image and Video Processing	
PhD Guide? Give field & University	Field:	Signal, Image and Audio Processing
	University:	Amity School of Engineering & Technology (ASET), Amity University Rajasthan, Jaipur
PhDs / Projects Guided	: PhDs : Projects at Masters level:	Face Sketch Photo Recognition for Criminal Detection Perception Path and Planning and Control for Autonomous Vehicles using conventional AI Based techniques

Books Published / IPRs / Patents	Books	Mathematics for Polytechnic Students, Reliable Publications, Mumbai. First Year, Diploma in Electronic, Computer, Chemical Engineering & allied branches. Maharashtra State Board of Technical Education (MSBTE) Engineering Mathematics Vrinda Publications, Jalgaon, Second Year Diploma in Electronic, Computer and Information Technology. Maharashtra State Board of Technical Education (MSBTE
Professional Memberships	Senior Member, IEEE	85020348
	Life Member of Indian Society of Technical Education (ISTE)	LM 43907
Consultancy Activities	Consultant	Blue Star InfoTech, Mumbai, 2008-2009 Image Processing Projects under the direct supervision of BARCO U.K. Solutions for Interactive segmentation of abdominal aortic aneurysms in CTA images
Awards		
Grants fetched	:	UGC Grant 2019-2020
Interaction with Professional Institutions	:	Associate Editor, IEEE Open Access Member of SKEP (Skill and Knowledge Enhancement Program), IEEE Bombay Section Technical Programme Chair at International Conferences: International Conference on Advanced Computational and Communication Paradigms, (ICACCP-2019), SMIT, Sikkim, India. Int'l Conference on Discrete Mathematics and Computer Mathematics, Chongqing, China during Sept 15-17, 2018 International Conference on Artificial Intelligence and Computer Science, CHINA, 2017. International Conference on Material Science and Engineering Application, Nanjing China, 2017. International Conference on Computer, Mechatronics and Electronic Engineering (CMEE2017), China, December 2017
Subjects Taught	**UG Level:**	1. Random Signal Analysis 2. Discrete Time Signal Processing 3. Image and Video Processing 4. Speech Processing 5. Advanced Digital Signal Processing 6. Image Processing & Machine Learning 1. Statistical Signal Analysis 2. Digital Signal Processing and Applications 3. Modern Digital Communication 4. Advanced Image and Video Processing 5. Advanced Speech and Audio Processing
	PG Level:	

Projects Guided	UG Level: PG Level	1. Audience Measurement System 2. **PG Level:** **1.** Face Sketch Photo Recognition for Criminal Detection **2.**	
Recommended Students for Higher Education		**Name of the Student**	**University/Industry**
Institute/Department Responsibility handled:		➤ NAAC Criteria 6 Institute Level Coordinator ➤ NBA Criterion 6 Department Level Coordinator ➤ Admission Committee Member ➤ ➤	
Pedagogy Development		https://karamchandaniprofile.wordpress.com/flipped-classroom-for-discrete-time-signal-processing/	