PERSONAL DETAILS AND	AFFILIATION	
Name of the Faculty Member	Mrs. V.SRIRENGANACHIYAR	
Designation	ASSISTANT PROFESSOR	719
Department	ELECTRONICS AND COMMUNICATION ENGINEERING	
Date of joining the institution	18.06.2025	
Address for Communication	Department of ECE, National Engineering College, Kovilpatti	
Email ID	sriece@nec.edu.in, srivenkatraman4@gmail.com	

EDUCATIONAL QUALIFICATION						
S.NO.	QUALIFICATION	INSTITUTION STUDIED	UNIVERSITY / BOARD	Class	YEAR OF PASSING	
1.	Ph.D (Biomedical Signal Processing)	Anna University, Chennai	Anna University, Chennai	-	Pursuing	
2.	M.E. (Computer and Communication)	National Engineering College, Kovilpatti	Anna University, Chennai	8.12 CGPA First Class	2012	
3.	B.E (ECE)	P.S.R Engineering College, Sivakasi	Anna University, Chennai	75% First Class with Distinction	2010	
4.	HSC	The Lakshmi Mills Higher Secondary School, Kovilpatti	State Board	87%	2006	
5.	SSLC	Nadar Higher Secondary School, Kovilpatti	State Board	87.2%	2004	

EXPE	EXPERIENCE						
C NO	NAME OF THE	POSITION	EDOM	TO	EXPER	RIENCE	
S.NO.	INSTITUTION / ORGANIZATION	HELD	FROM	ТО	Y	M	
1.	National Engineering College, Kovilpatti	Assistant Professor	18.06.2025	Till Date	-	-	
2.	Ramco Institute of Technology, Rajapalayam	Assistant Professor (Senior Grade)	June 2018	June 2025	7	0	
3.	Ramco Institute of Technology, Rajapalayam	Assistant Professor	December 2015	May 2018	2	6	

4.	P.S.R. Rengasamy College of Engineering for Women, Sivakasi	Assistant Professor	July 2013	October 2015	2	4
5.	P.S.R Engineering College, Sivakasi	Assistant Professor	June 2012	June 2013	1	0

	Conege, Sivakasi
LIST	OF INTERNATIONAL JOURNAL PUBLICATIONS
1.	Presented a paper titled "Smart Automated Surveillance System" at the 1st International Conference on Microstructure, VLSI, Robotics, Communication, Electrical and Emerging Technologies using AI-ML algorithms, in association with Taylor & Francis, 21-22 March 2025. DOI: 10.1201/9781003684589
	Published paper titled "Gray wolf optimization-based intelligent clustering mechanism for
2.	energy-efficient and trust-aware communication in IoT networks" 1 <sup>st</sup> International Conference on Microstructure, VLSI, Robotics, Communication, Electrical and Emerging Technologies using AI-ML algorithms, in association with Taylor & Francis, 21-22 March 2025. DOI: 10.1201/9781003684589
_	Published a paper titled "Smart Bin System Based on IoT for Effective Food Waste
3.	Management", 2025 IEEE 4th International Conference on Sentiment Analysis and Deep Learning (ICSADL), Nepal, 27 March 2025. DOI: 10.1109/ICSADL65848.2025.10933108
1	Published a paper titled "Analysing the pathogenic relationship between the heart and kidney
4.	<b>using bio signals",</b> 2024 International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation (ARIIA), Manipal, India, 2024. DOI: <u>10.1109/ARIIA63345.2024.11051759</u>
5.	Published a paper titled "Predictive Modeling for Network Anomaly Detection Using Machine Learning", <i>IEEE Xplore</i> , 20 August 2024. DOI: 10.1109/ICSCSS60660.2024.10625631
6.	Published a paper titled "MIMO-OFDM System Performance Analysis with SystemVue", 2024 IEEE International Conference on Social and Sustainable Innovations in Technology and Engineering (SASI-ITE), 29 July 2024. DOI: 10.1109/SASI-ITE58663.2024.00079
7.	Published a paper titled "A Car Parking Guidance System to Lessen the Traffic in the Parking Lot Using Arduino", 2024 IEEE 4th International Conference on Pervasive Computing and Social Networking (ICPCSN), 30 July 2024. DOI: 10.1109/ICPCSN62568.2024.00127
8.	Published a paper titled "Performance Evaluation of Different MIMO Systems", Journal of Pharmaceutical Negative Results, 2023.
9.	Published a paper titled "Analysis of Liver Tumor Segmentation Using Deep ResUNet", <i>IEEE Xplore</i> , 27 March 2023. DOI: 10.1109/ICAIS56108.2023.10073676
10.	Published a paper titled "Smart Health Monitoring System in Intensive Care Unit Using Bluetooth Low Energy and Message Queuing Telemetry Transport Protocol", <i>IEEE Xplore</i> , 14 March 2023. DOI: 10.1109/ICSSIT55814.2023.10061050
11.	Published a paper titled "Drug Delivery System for Chronic Obstructive Pulmonary Diseases Using IoT", International Journal of Health Sciences, 2022.
12.	Published a paper titled "Cooperative Driving: Vehicle-to-Vehicle Communication", V. SrirengaNachiyar et al., <i>The Patent Office Journal</i> , No. 47, 19 November 2021, pp. 54768.
13.	Published a paper titled "User Wearable Device for Face Recognition", M.Sangeetha et al., Application No. 202141001155, <i>The Patent Office Gazette</i> , 22 January 2021.
14.	Published a paper titled "Cloud-Based Food Waste Management Using Green IoT", Journal of Green Engineering, 2020.
15.	Published a paper titled "SMART Irrigation System Using Arduino", International Journal of Electronics and Communication Engineering, 2017.
16.	Published a paper titled "Active Contour Based Visual Tracking Using Level Sets", International Journal of Scientific & Engineering Research, Vol. 5, Issue 5, pp. 229–234, 2014. ISSN: 2229-5518.
17.	Published a paper titled "Improved Security in Multi-AESTHETIC Processor Using AES  Architecture" International Journal of Computer Applications, Vol. No. 5, pp. 27–31, 2012

**Architecture**", *International Journal of Computer Applications*, Vol. –, No. 5, pp. 27–31, 2012.

## LIST OF INTERNATIONAL / NATIONAL CONFERENCE PUBLICATIONS Presented a paper titled "Gray wolf Optimization-based intelligent clustering mechanism for 1. energy efficient and trust-aware communication in IoT networks" at the 1st International Conference on Microstructure, VLSI, Robotics, Communication, Electrical and Emerging Technologies using AI-ML algorithms, in association with Taylor & Francis, 21-22 March 2025 Presented a paper titled "Smart Automated Surveillance System" at the 1st International Conference on Microstructure, VLSI, Robotics, Communication, Electrical and Emerging Technologies using AI-ML algorithms, in association with Taylor & Francis, 21-22 March 2025 Presented a paper titled "Automated Sensor-Based Filtration System for Reducing Ammonia 3. and H2S Emission in Poultry Farms" at the 2nd International Conference on Multi-Strategy Learning Environment (ICMSLE 2025), Springer, scheduled on 26–27 February 2025. Presented a paper titled "CNN-Based Intelligent Automated Sericulture Monitoring System" 4. at the 4th International Conference on Recent Trends in Engineering, Technology and Management (ICRETM 2024), Suguna College of Engineering, Coimbatore, in collaboration with Samarkand State University, Uzbekistan, 5 April 2024. ISBN: 978-81-965908-7-1 Presented a paper titled "RSSI-Based Border Range Alert and Native Harbour Guidance System for Boat Safety" at the 4th International Conference on Artificial Intelligence, 5G 5. Communications and Network Technologies, Velammal Institute of Technology, Chennai, 21–22 March 2024. Presented a paper titled "A Car Parking Guidance System to Lessen the Traffic in the Parking 6. Lot Using Arduino" at the 4th IEEE International Conference on Pervasive Computing and Social Networking (ICPCSN), 3 May 2024. Presented a paper titled "MIMO-OFDM System Performance Analysis with SystemVue" at the 7. 2024 International Conference on Social and Sustainable Innovations in Technology and Engineering (SASI-ITE'24), organized by IEEE Computer Society, Vizag Bay Section, Andhra Pradesh, 23–25 February 2024. Presented a paper titled "Analysing the Pathogenic Relationship Between the Heart and 8. Kidney Using Bio Signals" at the 1st International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation, Manipal University, 2024. Presented a paper titled "EEG Signal Classification Using AI" at the 2023 IEEE International 9. Humanitarian Conference for Sustainability (IIHC-2023). Presented a paper titled "Deep Convolutional Neural Network Architecture for Automatic 10. Detection of Brain Tumors in MR Images" at the 9th ISTE Sponsored ICLTSET'23, Karpagam Institute of Technology, Coimbatore, 5–6 May 2023. Presented a paper titled "Classification of EEG Signals Using AI" at the International 11. Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'23), Karpagam Institute of Technology, Coimbatore, 5–6 May 2023. Presented a paper titled "Advanced Mobile Application for Effective Communication of Deaf 12. and Dumb People" at the 3rd ACE International Conference on Applied Science, Engineering, Technology and Management, Alpha College of Engineering, Chennai, 23 September 2022. Presented a paper titled "Design and Development of Animal Detection System to Avoid 13. **Collision**" at the 3rd National Conference on Communication and System Design, PSG Institute of Technology and Applied Research, Coimbatore, 11 June 2022. Presented a paper titled "Energy-Efficient Node Deployment in Heterogeneous Two-Tier 14. Wireless Sensor Networks Using Neural Training" at the 2nd National Conference on Recent Trends in Engineering, Science and Management, Kurinji College of Engineering and Technology, 09 June 2022. Presented a paper titled "Analyzing the PQRST Parameters from ECG Signal to Identify 15. **Types of Heart Disease"** at the National Conference on Intelligent Computing and Automation (INSTRUVISION'21), Kamaraj College of Engineering and Technology, 09 April 2021.

Presented a paper titled "Cloud-Based Food Waste Management" at the International Web

Conference on Smart Engineering Technologies, Ramco Institute of Technology, Rajapalayam,

16.

2020.

17.	Presented a paper titled "Smart Parking Management System" at the 7th National Conference on Advanced Computing and Technologies (NCACT'20), Velammal Engineering College, Madurai, 2020. Presented a paper titled "Implementation of Vedic Multiplier Using Pipeline Architecture" at NCACT'19, Kongu Engineering College, Erode, 2019.
18.	Presented a paper titled "Data Security Using AES Algorithm in Nonvolatile Main Memory (NVMM)" at National Conference on Advances in Computing Technologies (NCACT'19), Kongu Engineering College, Erode, 2019.
19.	Presented a paper titled "Accident Avoidance Due to Overtaking and Drowsiness" at <i>ICEAT</i> , Sri Krishna College of Technology, Coimbatore, 2018.
20.	Presented a paper titled "Car Parking Guidance Using Arduino" at the <i>International Conference on Engineering and Advancement in Technology (ICEAT)</i> , held at Sri Krishna College of Technology, Coimbatore, 2018.
21.	Presented a paper titled "Smart Irrigation System Using Arduino" at ICRTECITA'17, held at PSNA College of Engineering and Technology, Dindigul, 2017.

WORK	WORKSHOPS/SEMINARS/CONFERENCES/TRAINING PROGRAMMES ATTENDED					
S.NO.	NAME OF THE PROGRAMME & VENUE		DURATION			
			ТО			
1.	R&D Conclave 2024 for Faculty members and Researchers, RIT - RC	26.12.	2024			
2.	ATAL FDP on "Quantum Computing- Research Perspective in Healthcare Applications", P.S.R. Engineering College, Sivakasi	16.12.2024	21.12.2024			
3.	Extramural Lecture Series (ELS)- Mapping the CDIO Syllabus for Sustainability", RIT-IQAC	20.12.	2024			
4.	ATAL FDP on "Next Generation smart grids for Sustainiable Power Systems: The path from Industry 4.0 to 5.0", Sri Krishna college of Engineering and Technology, Coimbatore	02.12.2024	07.12.2024			
5.	Two days FDP on Advanced AI tools for preparing Research Paper, SASI Institute of Technology and Engineering in association with Pencil Bitz	08.11.2024	09.11.2024			
6.	INDUSTRY ASSISTED LECTURE ON HANDS ON SESSION ON USING DATA-PREP-KIT FOR FINE TUNING LLMS, IITM PALS	27.08.2024	31.08.2024			
7.	One day workshop on Exploring AI tools for Effective Academics, RIT Research Coucil and Central Library	29.07.2024				
8.	Innovations in Bacterial Signaling Dynamics: Driving Forces in Biohydrogen and Biomethane Production, PSGR Krishnammal College for Women, Coimbatore	11.01.24				
9.	3 Day FDP on Applications of MATLAB in Research Perspective, Ramco Institute of Technology, Rajapalayam	21.06.2023	23.06.2023			
10.	NAAN MUDHALVAN FDP on "Professional Readiness for innovation, Employability & Entrepreneurship-IOT", IBM	13.02.2023	17.02.2023			
11.	one-day National level online workshop on "Journal Paper Writing, Ramco Institute of Technology, Rajapalayam	10.02.	2023			
12.	"Online webinar on Research Proposal Writing", Ramco Institute of Technology, Rajapalayam	30.01.2023				
13.	Nanomaterials for Novel Applications, Ramco Institute of Technology, Rajapalayam	13.01.2023				
14.	Recent Trends in Antenna Design and its applications, Sethu Institute of Technology, Kariappatti	29.12.	2022			

15.	NAAC sponsored two day national level workshop on "Role of NAAC in Enhancing Quality in Higher Education Institutions", Ramco Institute of Technology, Rajapalayam	16.12.2022	17.12.2022	
16.	National Level webinar on "Need of Image Processing in Medical Field", SIMATS School of Engineering	26.05.2022		
17.	Anna University Sponsored Online Six Days FDP on "EC8701-Antennas and Microwave Engineering", Ramco Institute of Technology, Rajapalayam	20.06.2022	20.06.2022 25.06.2022	
18.	Incorporating Universal Human Values in Education, AICTE	28.02.2022	04.03.2022	
19.	Research Avenues in Microwave Technologies, Kumaraguru College of Technology, Coimbatore	28.06.2021	30.06.2021	
20.	Workshop on Project Based Learning, IUCEE	18.06.2021	19.06.2021	
21.	Faculty Student Development Program on Cyber Security & privacy - AI and cloud database systems, IITM PALS	09.12.2021	11.12.2021	
22.	Deep Learning based video analytics for Surveillance IOI applications, GSSS Institute of Engineering and Technology for Women	13.07.	2021	
23.	Online Elementary ATAL FDP on "Bio- Medical Signal Processing for Smarter Mobile Health Care, GIET University	19.07.2021	23.07.2021	
24.	How to Write Quality Research Proposal, Ramco Institute of Technology in Collaboration with DRDO	21.12.	2021	
25.	PBL Problem Characteristics and Influence on Outcomes, IUCEE Foundation	18.06.	2021	
26.	Introduction to Machine Learning and Deep Learning, Ramco Institute of Technology, Rajapalayam	25.03.	2021	
27.	Implementation of National Education Policy – 2020, Ramco Institute of Technology, Rajapalayam	24.03.2021		
28.	Knowledge Versus Skills Dilemma in the Midst of Industry 4.0, Education 4.0, Covid-19 and Beyond, UML Global Entrepreneurship Webinar	12.11.2020		
29.	The Need for a National Education Policy (NEP) & the Reforms in NEP 2020, Ramco Institute of Technology, Rajapalayam	10.11.	10.11.2020	
30.	Common Session of eSIP Online Student Induction Program Sampler, AICTE NCC-IP	08.11.2020	20.11.2020	
31.	AICTE sponsered one week online STTP on "Supporting open Technologies for Deployed Artificial Intelligence, P.S.R. Engineering College, Sivakasi	27.10.2020	02.11.2020	
32.	Orientation Program on "Patent Search and Drafting", Ramco Institute of Technology, Rajapalayam	24.10.	2020	
33.	Interpersonal Skills of Best Behavioural Teachers - Series III, P.S.R. Engineering College, Sivakasi	19.10.2020	24.10.2020	
34.	Online FDP on Artificial Intelligence, Rajkiya Engineering College Sonbhadra	21.09.2020	25.09.2020	
35.	IoT Paradigms and solutions for next generation smart ecosystems - Digital future for the new normal, Coimbatore Institute of Technology, Coimbatore	12.08.2020		
36.	ATAL FDP on Biomedical Instrumentation, University BDT College of Engineering, Davangere	12.07.2020		
37.	Aspects of Outcome Based Education and use of software, Sri Venkateswara College of Engineering and Technology, Chennai	06.08.2020 10.08.2020		
38.	Machine Learning using Python, Ramco Institute of Technology, Rajapalayam	08.07.2020	12.07.2020	
39.	Python Training Programme, Ramco Institute of Technology, Rajapalayam	08.06.2020	12.06.2020	
	SIGNAL, IMAGE & VIDEO PROCESSING : A PRACTICAL APPROACH,	26.05.2020 30.05.2020		

41.	Where Technology Meets Business: Industry 4.0, Nehru Institute of Management studies, Coimbatore	17.05.	17.05.2020	
42.	IPR Awareness, Keyway Research	13.05.	2020	
43.	Online Faculty Enrichment Programme, Mannar Thirumalai Naicker College, Madurai	13.05.2020	19.05.2020	
44.	Microchips Internet of Things, Sri Venkateshwara College of Engineering, Chennai	13.05.	2020	
45.	Multi criteria Decision Making, REST Society for Research International	23.04.2020	25.04.2020	
46.	Believe in the power of Mentoring, P.S.R. Engineering College, Sivakasi	05.06.	2020	
47.	The role of Modified lead systems in Clinical Electro-cardiography, Chennai Institute of Technology, Chennai	01.06.	2020	
48.	What the best college teachers do, Ramco Institute of Technology, Rajapalayam	29.05.	2020	
49.	Research Material and Reference Management using Zotero, Ramco Institute of Technology, Rajapalayam	29.05.	2020	
50.	Technology - The future of recruitment, Sri Eshwar College of Engineering, Coimbatore	23.05.	2020	
51.	How to overpower COVID-19 challenges, P.S.R. Engineering College, Sivakasi	20.05.	2020	
52.	Future of communication Engineering, Sri Eshwar College of Engineering, Coimbatore	20.05.	2020	
53.	Effective use of Learning Management System, Ramco Institute of Technology, Rajapalayam	09.05.2020		
54.	Art of writing research papers, Chennai Institute of Technology, Chennai	29.04.	29.04.2020	
55.	ICTACT Organized "FDP on Team Building", Ramco Institute of Technology, Rajapalayam	18.11.2019 20.11.2019		
56.	ISTE Faculty Series-2, Ramco Institute of Technology, Rajapalayam	29.10.2019		
57.	ISTE Faculty Series – 1, Ramco Institute of Technology, Rajapalayam	18.10.	2019	
58.	NBA Awareness and Orientation Programme, Ramco Institute of Technology, Rajapalayam	23.11.	2019	
59.	ICTACT organized "FDP on Team Building", Ramco Institute of Technology, Rajapalayam	18.11.2019	20.11.2019	
60.	One day hands on training on "Analog Discovery Kit", Ramco Institute of Technology, Rajapalayam	22.06.	2019	
61.	FDP on HTIC, MedTech Incubator, IITM Research Park, Chennai	24.01.2019	25.01.2019	
62.	AICTE sponsored FDP on Human Values and Professional Ethics, Ramco Institute of Technology, Rajapalayam	30.10.2017	12.11.2017	
63.	FDP on RF and Microwave Engineering, Ramco Institute of Technology, Rajapalayam	12.06.2017	16.06.2017	
64.	Workshop on "NS3 Simulator for Future Generation Wireless Networks", Anna university, Chennai	25.02.2017	25.02.2017 26.02.2017	
65.	Faculty Development Programme on "Electronic Circuits: Theory & Practice", Thiagarajar College of Engineering and Technology, Madurai	23.05.2016	29.05.2016	
66.	ISO Orientation Program, Ramco Institute of Technology, Rajapalayam	05.06.2017	06.06.2017	
67.	Value added course on VLSI Design and Simulation, Ramco Institute of Technology, Rajapalayam	14.12.2015	18.12.2015	
68.	Value added course on Project based learning using ARDUINO, Ramco Institute of Technology, Rajapalayam	09.12.2015	13.12.2015	

69.	Workshop on Embedded Systems and its Applications, Ramco Institute of Technology, Rajapalayam	21.12.2015	22.12.2015
70.	Awareness & Internal Auditor Training on ISO 9001:2015, Ramco Institute of Technology, Rajapalayam	18.12.2015	19.12.2015

S.NO.	NAME OF THE PROGRAMME & VENUE	DURA FROM	TION TO
1.	Non-Teaching Staff STTP on "Empower 360: Skill Enhancement for Non-Teaching Staff"	03.02.2025	07.02.2025
2.	5G networks –Applications in Biomedical Engineering	18.12.2023	23.12.2024
3.	Advanced research in Biomedical Engineering	29.01.2024	02.02.2024
4.	Guest lecture "ADAS & connected cars"	26.09	.2023
5.	Technical Crossword puzzle	26.04	.2023
6.	Anna University Sponsored Online Six Days FDP on "EC8701-Antennas and Microwave Engineering"	20.06.2022	25.06.2022
7.	Engineer's day – project expo	27.09	.2022
8.	Guest Lecture on "Wearable Sensors on Biomedical Applications"	27.01.2022	
9.	Webinar on "Prevention of Sexual Harassment at work Place"	10.12.2022	
10.	RIT - Electronica Association Inaugural	29.10.2021	
11.	Ideathon	30.08.2021	
12.	Spring Tech Fun	28.06.2021	30.06.2021
13.	Quiz time	04.06	5.2021
14.	Connect with ECE	27.11	.2020
15.	Technical Film Show on "Any Technical Concepts"	18.10	.2020
16.	National Web Conference on challenges and innovations in Engineering and Technology'21	19.03.2021	20.03.2021
17.	Webinar – Spring Tech Fun	28.06.2021	30.06.2021
18.	Webinar - The Best Tactics and Tips to achieve it	19.08.2020	
19.	International Chess Tournament - Registration Committee	30.11.2019 03.12.2019	
20.	Technical Quiz- Tech Fest'19	14.09.2020	
21.	TECHYUGA' 19 State level technical symposium	31.08.2020	
22.	International Web Conference on Smart Engineering Technologies- 2020	26.06.2020 27.06.2020	
23.	Two days workshop on "Quad-Copter"	12.02.2020	13.02.2020

24.	AI and its Impact in Applications	07.06.2020	
25.	Faculty Development Training Programme on EC8451 - Electromagnetic Fields	03.12.2018	15.12.2018
26.	Faculty Development Training Programme on RF And Microwave Engineering	12.06.2017	16.06.2017
27.	Value added course on "Arduino with IOT"	05.12.2016	13.12.2016

ONLINE COURSES COMPLETED (MIT EDX, Coursera, NPTEL, etc.)		
SL.NO.	NAME OF THE COURSE	UNIVERSITY
1.	'National Education Policy2020: Professional Development Programme'	NPTEL
2.	Ethics Review of Health Research-NIeCer 102	NPTEL
3.	NIeCer 103: Scientific Writing in Health Research	NPTEL
4.	Differential Equations Part I Basic Theory	Coursera
5.	Mathematics for Machine Learning: Linear Algebra	Coursera
6.	Mathematics for Machine Learning: Linear Algebra	Coursera
7.	MATLAB Onramp	Math Work Training Services
8.	Transfer Functions and the Laplace Transform	EDX
9.	Probability – The Science of Uncertainty and Data	MITx
10.	MITx – 6.002.1x Circuits and Electronics 1: Basic Circuit Analysis	Massachusetts Institute of Technology, USA
11.	MITx – 3.15.1x Electronic Materials and Devices	Massachusetts Institute of Technology, USA
12.	MITx – 6.002.2x Circuits and Electronics 2: Amplification, Speed, and Delay	Massachusetts Institute of Technology, USA
13.	MITx – 6.002.3x Circuits and Electronics 3: Applications	Massachusetts Institute of Technology, USA
14.	MITx – 18.01.1x Calculus 1A: Differentiation	Massachusetts Institute of Technology, USA
15.	MITx – 18.01.2x Calculus 1B: Integration	Massachusetts Institute of Technology, USA
16.	MITx – 18.01.3x: Calculus 1C: Coordinate Systems & Infinite Series	Massachusetts Institute of Technology, USA
17.	Introduction to Differential Equations	Massachusetts Institute of Technology, USA
18.	AI For Everyone	Deep learning AI
19.	Introduction to Applied Machine Learning	Alberta Machine Intelligence Institute
20.	Introduction to Machine Learning	Duke University

21.	Vector Calculus for Engineers	The Hong Kong University of Science and Technology
22.	Machine Learning with Python: A Practical Introduction	IBM
23.	Programming for Everybody (Getting Started with Python)	University of Michigan

Patent Filed & Awarded		
1.	Patent Granted for 20 Years titled "User Wearable Device for Face Recognition".	
2.	"User Wearable Device for Face Recognition" Application number: 202141001155 patent published in Gazette on 22.01.2021.	
3.	"Cooperative Driving: Vehicle to Vehicle Communication", Patent applied, The Patent Office Journal No. 47/2021 Dated 19/11/2021, pp. 54768.	

## Copyright filed/Granted

1. Copy right filled on titled "Advanced Digital Signal Processing" laboratory manual on 10.08.2024 & granted on 08.06.2025

## **Membership in professional Societies**

1. Indian Society for Technical Education ISTE Life member: LM95416