Name:	LAKSHMI G			
Designation:	ASSISTANT PROFESSOR			
Qualification:	M.E,(Ph.D)			
Area of specialization:	OPTICAL COMMUNICATION, MACHINE LEARNING AND EMBEDDED SYSTEM TECHNOLOGIES			
Experience: (As of Aug 2021)	Industrial Experience		Teaching Experience	
	-		9 years 2 months (as on 16.02.2026)	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	19		45	
Publications:	Conference		Journal and Book	
	National	International	Book	International Journal
	1	24	1	8
Patents:	National		International	
	4 (Published)		-	
Professional Body Membership:	1. IEEE Member Number 97927571 2. IEEE Communication Society Member – from 2022 3. IEEE VTS Society Member – 2023 4. IEEE Photonics Society 5. IEEE Computer Society-2022 6. IEEE Young Professional Member			

	7. IEEE Circuits and systems society member 8. IEEE Industrial Electronics Society Member 9. IEEE Society on social implications of technology member 10. IEEE SIGHT, NTA 11. International Association of Engineers (IAENG) Member Number-225911
Staff Achievements:	1. Scored University Fourth Rank in PG (2016 Anna University) 2. Organized and delivered a lecture for "Two days Hands-on Training on Domestic and Industrial System Automation using Proteus Software" from 05.06.2017 to 06.06.2017 3. Organised and acted as a resource person for "Two days Hands-on Training on Microcontroller-based System Design using Proteus Software" from 20.11.2017 to 21.11.2017. 4. Organised Mini Project contest for second-year students in Saranathan College of Engineering on 06.02.2018. 5. Obtained 100% results in the following subjects: Opto Electronic Devices, Digital Audio Engineering, Electronic Devices, Linear Integrated Circuits and Applications, Transmission Lines and RF systems 6. No. of completed NPTEL Courses: 16 7. No. of completed Online Courses: 10 8. No. of completed NITTTR courses: 8 9. Successfully completed Participating in the Guinness World Record Event – Most users to take an online computer programming lesson in 24 hours on 24.04.2021, 6 PM to 25.04.2021, 6 PM 10. Guided a project for visually impaired people; students participated in the Innoculture Ideation Contest 2021 (International level Contest) and won 300 USD as a prize amount. 11. Successfully completed Python 3.4.3 test organised at Sri Sairam Engineering College with course material provided by the Spoken Tutorial Project, IIT Bombay. 12. Received IEEEXtreme proctor certificate – October 2022 13. Ph.D. Coursework Completed. 14. Mentor for Certificate Course on Data Analytics under PayPal's Student Enablement Program held from 30 Jan 2023 to 23 Feb 2023

15. Participated in the 5G & 6G Hackathon 2024 held on 26th and 27th september 2024 organised by Ministry of Communications, ITUWSA, New Delhi in IISC Bangalore.

16. Published one book.

17. NPTEL STAR- BELIEVER JAN-APR 2025

18. NPTEL STAR- ENTHUSIAST JAN-APR 2025

19. Successfully completed the Certificate Course on Panchayat Administration and Rural Development Schemes, conducted by the State Institute of Rural Development and Panchayat Raj in October 2025.

20. NPTEL Data Science Domain Scholar, NPTEL Motivated Learner, NPTEL Discipline Star, NPTEL Believer- July -Oct 2025

21. Approved IEEE Tech4Good Funded Project - "Ruralcomm- Decentralized mesh Network for Resilient Village Connectivity"- $9134 +$500

Workshop Details:	Sl. No.	Title	Venue	Month/Year
	1	Applications of Mathematical Models in Digital Image Processing	University College of Engineering, Dindigul.	30.09.2015
	2	Image Processing for Biomedical Applications (IPBA-2016)	Amrita School of Engineering, Coimbatore.	16.12.2016-17.12.2016
	3	10 Attributes of High Impact Teacher	Saranathan College of Engineering, Trichy. Association with ICT Academy.	10.08.2018-11.08.2018

	4	Three days workshop on "Research and Development Activities"	Sri Sairam Engineering College, Chennai	28-12-2020 - 30-12-2020
	5	Workshop on "Awareness on google tools for Teaching-Learning and Data Management"	Sri Sairam Engineering College, Chennai	23-01-2021
	6	One day workshop on " Orange data Mining Tool"	Sri Sairam Engineering College, Chennai	15-05-2021
	7	Workshop on " Tinker your ideas to the next level"	Sri Sairam Engineering College, Chennai	22-05-2021
	8	Three days national level workshop on "Centroid of Engineering in AI & ML"	Sri Venkateswara College of Engineering, Chennai.	12-08-2021 - 14-08-2021
	9	IEEE sponsored Virtual hands-on training on "Data Science using R programming"	Sri Sairam Engineering College, Chennai	24.08.2021
	10	Two days virtual Workshop on "Art of Research"	Sri Sairam Engineering College, Chennai	23.08.2021 - 24.08.2021
	11	Two-day Awareness Workshop on Improving Research and Performance outcomes	Elsevier	31.08.2021 - 01.09.2021

	12	Two day workshop on "Advancements in Optical Communication & photonics design simulation using optiwave Photonic design and simulation Tools"	Vellore Institute of Technology, Chennai	06.12.2021 - 07.12.2021
	13	Breakthrough Technologies for Engineering Education and Research" (Software Defined Test & Measurements and Metaverse)	NITTTR, Taramani, in association with Liquid Instruments USA and ARK Infosolutios Delhi	20.01.2023
	14	Fiber Optic Simulation Tools	School of Electronics Engineering, Vellore Institute of Technology, Vellore	16.03.2023- 17.03.2023
	15	AI and Automation in MS Excel	Skill Nation	11.07.2024
	16	Next Generation Photonic Communication Design with Optiwave	SRM Institute of Science & Technology, Kattankulathur, Chennai	13.11.2024
	17	Radar and towards millimeter wave Radar signal processing and Learning based applications	Sri Sai Ram Engineering College, Chennai	19.09.2024- 20.09.2024
	18	Advanced Optical Communication and Photonics	VIT Vellore	18.05.2025

	19	Three day workshop on Advanced Instrumentation: From OTDR to vector Network Analyzer	MIT campus, Anna University, Chennai	29.01.2026-31.01.2026
Seminar Details:	**Sl. No.**	**Title**	**Venue**	**Month/Year**
	1	Model Development for Biological Anomaly Detection Using Immune Engineering Tools	Kongu Engineering College, Erode.	10.12.2015 - 11.12.2015
	2	Enhancing Quality Teaching Strategies through Outcome-Based Education	Kongu Engineering College, Erode.	02.03.2021 - 03.03.2021
	3	Outcome based Teaching learning process in Technical Education	National Institute of Technical Teachers Training and Research (NITTTR), Chennai	06.05.2021
	4	Digital Evolution in Higher education -Post Pandemic How Agility & Adaptability is Driving Innovative Teaching	IEEE Associated with EBSCO at Le Royal Meridien, Chennai	03.12.2021
	5	Research and Publication Writings and Tips	IEEE Madras Section Young Professionals	22.10.2022
	6	Awareness Training Program-IPR	National Intellectual Property Awareness Mission (NIPAM), Government of India	20.10.2022

	7	Self Evolving and Transformative (SET) Protocol Architecture for 6G	IEEE Madras Section Vehicular Technology Society Chapter	17.11.2022
	8	Reconfigurable Intelligent and Holographic surfaces for Wireless Communications	IEEE Madras Section Vehicular Technology Society Chapter	02.12.20222
FDP Details:	**Sl. No.**	**Title**	**Venue**	**Month/Year**
	1	A One-day FDP on Pedagogic Communication	Saranathan College of Engineering, Trichy.	27.12.2016
	2	Seven days FDTP on EC6502- Principles of Digital Signal Processing	Government College of Engineering, Srirangam.	08.05.2017 - 15.05.2017
	3	Two days Faculty Development Program on "Embedded Systems Laboratory"	Saranathan College of Engineering, Trichy.	22.06.2017 - 23.06.2017
	4	Faculty Development program on "Frontiers in Microwaves"	Indian Institute of Technology, Madras	22.10.2018 - 27.10.2018
	5	Design Implementation of Deep Learning Cloud	SRM Institute of Science and Technology, Chennai.	13.11.2019 – 15.11.2019
	6	C Programming and Assembly Language	NPTEL	July – August, 2019
	7	Internet of Things (IoT)	Government College of Engineering, Srirangam.	11.05.2020 - 15.05.2020

	8	Artificial Intelligence on Robotics	Sri Sairam Engineering College, Chennai.	07.12.2020 - 11.12.2020
	9	Machine learning and its application in IoT	Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology	04-01-2021 - 09-01-2021
	10	3-days online FDP Effective strategies to improve Mentor-Mentee Bonding	Easwari Engineering College	20-01-2021 - 22-01-2021.
	11	Artificial Intelligence, machine Learning and Deep Learning	Karpagam College of engineering	2-2-2021 - 6-2-2021
	12	FPGA based Digital system design with HDL (Phase 1)	Vel Tech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering College	25-01-2021 - 30-01-2021
	13	FPGA based Digital system design with HDL (Phase I1)	Vel Tech Multi Tech Dr.Rangarajan Dr.Sakunthala Engineering College	08-02-2021 - 13-02-2021
	14	Optical Sensors	NPTEL-AICTE	Jan-Feb 2021
	15	Interactive and activity-orientated 3-day online FDP on "How Teachers can make a difference"	Velagapudi Ramakrishna Siddhartha Engineering College	15-04-2021 - 17-04-2021
	16	Inculcating Universal Human Values in Technical Education (An AICTE Initiative)	AICTE	03.05.2021 - 07.05.2021

	17	Practical Exposure on Fundamental Mathematics behind Machine learning	SRM Institute of Science and Technology, KTR campus	10.05.2021 - 13.05.2021
	18	ATAL FDP on "Cognitive Radio, Antennas & Millimeter wave Communication"	Saranathan College of Engineering	07.06.2021 - 11.06.2021
	19	Advances in photonics and Fiber optics Technologies	IETE Chennai centre & IEEE photonics society madras chapter	21.06.2021 - 22.06.2021
	20	Machine Learning Applications on Image Processing	AICTE Training and Learning (ATAL) Academy	17.01.2022- 21.01.2022
	21	Fiber Optics and Optoelectronics Technology	IIITDM, Kancheepuram.	03.02.2022- 08.02.2022
	22	Image,Audio and Video Processing for Pattern Recognition	IEEE Signal Processing Society Madras Section.	23.06.2022- 28.06.2022
	23	Deep Learning and its Applications	ISTE, Sri Sairam Engineering College.	11.07.2022- 15.07.2022
	24	Recent Trends in 5G Communication Networks	IEEE Madras Section Sponsored FDP, Department of ECE, Sri Sairam Engineering College	26.12.2022- 30.12.2022
	25	Hands-on Training on Data Science Tools	Sri Sairam Engineering College, Chennai	23.01.2023- 28.01.2023

	26	IEEE Seasonal School on " Optical Signal Processing for Communication, Computing & Sensing"	Sri Sairam Engineering College, Chennai	06.03.2023-10.03.2023
	27	IoT Concepts and Applications	Madras Institute of Technology, Anna University	30.01.2023 - 04.02.2023
	28	Introduction to Internet of Things	NPTEL-AICTE	Jul-Oct 2022
	29	Introduction to Machine Learning	NPTEL-AICTE	Jan-Apr 2024
	30	Python for datascience	NPTEL-AICTE	Jul-Aug 2024
	31	Next-Generation Algorithms and Technological Advances	ATAL-AICTE-MIT MADRAS	06.01.2025-11.01.2025
	32	AI and Quantum Computing:Glimpsing the Near Future	ATAL-AICTE-Skill India	20.01.2025 - 25.01.2025
	33	AI Powered Modern Tools for Research	St.Xavier's College	05.03.2025-07.03.2025
	34	Deep Learning	NPTEL-AICTE	Jan-Apr 2025
	35	Natural language Processing	NPTEL-AICTE	Jan-Apr 2025
	36	Teaching And Learning in Engineering (TALE)	NPTEL-AICTE	Feb-Mar 2025
	37	NBA Accreditation and Teaching and Learning in Engineering (NATE)	NPTEL-AICTE	Jan-Apr 2025

	38	SEMI-TECH: Semiconductor Innovation & Technology for Next-Gen Electronics	SRM Institute of Science and Technology	18.08.2025 to 23.08.2025
	39	Development Research Methods	NPTEL-AICTE	Aug-Oct 2025
	40	Learning Analytics Tools	NPTEL-AICTE	Jul-Oct 2025
	41	Patent Drafting for Beginners	NPTEL-AICTE	Jul-Aug 2025
	42	Technical Communication for Engineers	NPTEL-AICTE	Jul-Aug 2025
	43	Introduction to Machine Learning	NPTEL-AICTE	Jul-Oct 2025
	44	Professional Development Program (PDP) on Advanced Design and Optimization Techniques for Next-Generation Antenna	Sri Sai Ram Engineering College	03.11.2025 to 08.11.2025
	45	Leveraging Explainable AI to enhance Communication systems , Signal and Image Processing	Sri Sai Ram Engineering College	17.11.2025 to 22.11.2025
Conference Details:	**Sl. No.**	**Title**	**Venue**	**Month/Year**
	1	**Title:** Numerical Solution for Image Reconstruction in Diffuse Optical Tomography	Karpagam College of Engineering, Coimbatore.	27.11.2015

		Conf Name: IEEE Sponsored Online International Conference on Green Engineering and Technologies (IC-GET).		
	2	**Title:** L/C/X triple band Compact Dipole Array Antenna for RADAR Application **Conf Name:** First International Conference on Emerging Electrical Energy, Electronics and Computing Technologies 2019. (ICE4CT 2019)	University Malaysia Perlis, NOVOTEL, Hotels & Residencies	29.10.2019-31.10.2019
	3	**Title:** Design of Helical Antenna for Ocean Application **Conf Name:** National Conference on Cutting Edge Technologies on Communication, Signal Processing and Networking. (NCCSN'19)	Saranathan College of Engineering, Trichy.	15.03.2019-16.03.2019
	4	**Title:** Design and Implementation of Hemispherical Helical Antenna. **Conf Name:** International Conference on Innovative Engineering Initiatives. (ICIEI-2019)	SRM TRP Engineering College, Trichy	13.03.2019-14.03.2019
	5	**Title:** Triple band compact Dipole Array antenna for RADAR Application.	Noorul Islam Centre for Higher Education, Kumaracoil, Kanyakumari.	10.04.2019-11.04.2019

		Conf Name: International Conference on Networks, Image and Security (ICNIS-2019)		
	6	**Title:** AI-powered Digital Classroom **Conf Name:** International Conference on Communication computing & Internet of Things (IC3IoT-2022)	Sri Sairam Engineering College, Chennai	10.03.2022-11.03.2022
	7	**Title:** Mapping the surface water using Convolution Neural Networks for Remote sensing Technology **Conf Name:** International Conference on Communication computing & Internet of Things (IC3IoT-2022)	Sri Sairam Engineering College, Chennai	10.03.2022-11.03.2022
	8	**Title:** Arduino based Universal Remote Controller for Infrared Appliances **Conf Name:** The International Conference on Bio-Neuro Informatics and Algorithms (ICBNA-2022)	Symbiosis Institute of Digital and Telecom Management	21.06.2022 - 22.06.2022
	9	**Title:** Verification of Job Authenticity using Prediction of Online Employment Scam Model (POESM) **Conf Name:** IEEE Technically sponsored First International Conference on Computational Science and	Sri Sairam Engineering College, Chennai	09.11.2022-10.11.2022

		Technology. (ICCST-2022)		
	10	**Title:** A Compact Medikit Health Monitoring Device **Conf Name:** IEEE Technically sponsored First International Conference on Computational Science and Technology. (ICCST-2022)	Sri Sairam Engineering College, Chennai	09.11.2022-10.11.2022
	11	**Title:** Realtime Pervasive Health Monitoring System **Conf Name:** IEEE Technically Sponsored Third International Conference on Power, Energy, Control and transmission Systems 2022(ICPECTS 2022)	Sri Sairam Engineering College, Chennai	08.12.2022-09.12.2022
	12	**Title:** IoT based Forest Fire Prediction Framework **Conf Name:** 2023 International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI)	SRM	19.4.2023-21.4.2023
	13	**Title:** Camobot - Thermal Image Processing Surveillance Rover with GPS Tracking and Human Detection Using OpenCV	SRM	19.4.2023-21.4.2023

		Conf Name: 2023 International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI)		
	14	**Title:** Empowering Deaf and Mute Children through Computer Vision **Conf Name:** 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	Sri Sairam Engineering College, Chennai	14.12.2023 -15.12.2023
	15	**Title:** Grouping based wrong-way vehicle detection **Conf Name:** 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	Sri Sairam Engineering College, Chennai	14.12.2023 -15.12.2023
	16	**Title:** Revolutionizing Home Fire Safety: IoT-Based Wireless Fire Alarm System for Easy Installation and Rapid Response **Conf Name:** 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	Sri Sairam Engineering College, Chennai	14.12.2023 -15.12.2023
	17	**Title:** Deep Learning-Based Tennis Shot Type Prediction Using Gait Analysis	Sri Sairam Engineering College, Chennai	14.12.2023 -15.12.2023

		Conf Name: 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)		
	18	**Title:** Ensuring Resilience: IoT-Driven Fault Detection in Fiber Optic Network **Conf Name:** 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)	Sri Sairam Engineering College, Chennai	17.04.2024-18.04.2024
	19	**Title:** Advancing Precision Agriculture: AI, IoT, and Machine Learning Solutions for Optimal Crop Yield **Conf Name:** 2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)	Sri Sairam Engineering College, Chennai	17.04.2024-18.04.2024
	20	**Title:** Harnessing the potential of conversational AI: A Roadmap for Academic Applications **Conf Name:** 2024 International Conference on Power, Energy, Control and Transmission systems (ICPECTS 2024)	Sri Sairam Engineering College, Chennai	08.10.2024-09.10.2024
	21	**Title:** AI based Mental Health Assisted Chatbot System **Conf Name:** 2024 International Conference on Power,	Sri Sairam Engineering College, Chennai	08.10.2024-09.10.2024

		Energy, Control and Transmission systems (ICPECTS 2024)		
	22	**Title:** Real-Time Environmental Impact Analysis on Optical Fiber Networks Using IoT and AI **Conf Name:** RAEEUCCI 2025	SRM Chennai	23.04.2025-25.04.2025
	23	**Title:** Driver's Drowsiness Detection and Prevention System **Conf Name:** 2025 11th International Conference on Communication and Signal Processing (ICCSP), Melmaruvathur	Adhiparasakthi Engineering College Melmaruvathur.	05.06.2025-07.06.2025
	24	**Title:** Precision Driven Sentiment and Topic Classification of News Articles using IndicBert Model (IBM) **Conf Name:** 2025 8th International Conference on Circuit, Power & Computing Technologies (ICCPCT)	Baselios Mathews II College of Engineering , kerala	07.08.2025-08.08.2025
	25	**Title:** deciBStudio – An Interactive Learning Tool Development using Generative-AI for Engineering **Conf Name:** 2025 3rd DMIHER International Conference on Artificial Intelligence in Healthcare,	DMIHER-DU	28.11.2025-29.11.2025

		Education and Industry (IDICAIHEI)		

Journal Details:	Sl. No.	Title	Journal Name	Volume/Date
	1	Numerical Solution for Image Reconstruction in Diffuse Optical Tomography	ARPN Journal of Engineering Applied Sciences	Vol 11, no.2, January 2016.
	2	Performance Analysis of Reconstruction Algorithms in Diffuse Optical Tomography	World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering	Vol:10, No:1, 2016
	3	Design of patch Antenna for ISM band applications using CST microwave studio	International journal of management, Technology and Engineering	Vol:9, No.4, April 2019.
	4	Design and Implementation of Hemispherical Helical Antenna	International Compliance Engineering Journal	Vol:10, Issue:8, August 2019.
	5	Automatic Face Detection Security Lock	Journal of Scientific computing	Vol:10, Issue:8, August 2021
	6	RFID based parking system	Compliance Engineering Journal	Vol:12, Issue:8, 2021

	Sl. No.	Title	Journal	
	7	Intelligent Encoding through OCDM for High Capacity and Connectivity in Wireless 5G and Beyond Networks	JOURNAL OF HIGH-FREQUENCY COMMUNICATION TECHNOLOGIES	Vol. 01 (03) (2023), pp.84-101. e-ISSN:2836 -9009 https://doi.org/10.58399/LUSI2152
	8	Hybrid lifetime prediction of DFB lasers using Arrhenius theory and machine learning	Journal of Optics	https://doi.org/10.1007/s12596-025-03029-3

Patent Details:	Sl. No.	Title	Application Number	Application Status
	1	CLOUD-BASED AUTOMATED 3D-LUNG CANCER SEGMENTATION AND DETECTION MODEL	202241032480	Published
	2	Intelligent IoT Network for Weather-Based Crop Management in Agricultural Fields	202431104610	Published
	3	REVOLUTIONIZING INDUSTRIAL POLLUTION CONTROL WITH AQI MONITORING AND CARBON RECYCLING	202541096412 A	Published

	4	SYSTEM AND METHOD FOR EARLY DETECTION OF LUMPY SKIN DISEASE IN CATTLE USING SENSOR-BASED MONITORING	202541096463A	Published