FACULTY PROFILE

Name of the Staff : **Dr. S.RAJAGOPAL**

Official Address with E-mail Id : Associate Professor/IT,

National Engineering College,

K.R.Nagar,

:

Kovilpatti-628503

rajatarget@nec.edu.in

Mobile Number : 9629668167

1. Personal Details

Age : 39

Date of Birth : 01-12-1985

Sex & Marital Status : Male & Married

Citizenship : Indian

Qualification : M.E., Ph. D.,

Degree	Programme and Specialization	Class /CGPA	Month &Year of Passing	Institute/University
B.E.	Electronics and Communication Engineering	First Class	April 2007	P.S.R. Engg College, Sivakasi
M.E	Computer and Communication	First Class	Dec 2011	National Engineering College, Kovilpatti
Ph.D	Information and Communication Engineering		Jan 2019	Anna University

Date of joining : 03-06-2009

Present status : Assistant Professor (SG)

Professional Experience :

Designation	Institution/ Organisation	Period	Nature of Duties
Assistant	National Engineering College,	03-06-2009 to	Teaching
Professor	Kovilpatti		
Assistant	National Engineering College,	15.07.2016 to	Teaching
Professor	Kovilpatti	31.03.2025	
(Senior Grade)			
Associate	National Engineering College,	01.04.2025 to till	Teaching
Professor	Kovilpatti	date	

Courses taught:

Course Title	U.G. or P.G.
Digital Signal Processing	
2. Digital System Design.	



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3. Database Management Systems	
4. Cryptography and Network Security	U.G
5. Information Security.	
6. Mobile Communication.	
7. Environmental Science and Engineering.	
8. Fundamentals of Computing and Programming.	
9. M-Commerce.	
10. Computer Architecture.	
11. Multimedia Computing	
12. Internet of Things	
13. Information Storage and Management	
Modern Digital Communication Techniques	
2. Advanced Digital Signal Processing	P.G
3. High Performance Computer Networks	
4. Computer Architecture and Parallel Processing	

2. Academic Achievements

2.1 Short term Courses / Seminars / Conference/ Workshops organised:

S.No	Title	Period	No. of Participant	venue
1	TECHNICAL PAPER			National Engineering
	WRITING USING	30.11.2012	30	College, Kovilpatti
	LATEX			

2.2 Short term Courses / Seminars / Conference/ Workshops Attended:

S.No	Title	Period	venue
1.	Workshop on J2EE and Websphere Application Developer	25.09.2009 & 26.09.2009	National Engineering College, Kovilpatti.
2.	Workshop on Ubiquitous Computing	29.01.2010 & 30.01.2010	C-DAC, Chennai
3.	Faculty Updation Training on Linux Driver Development	17.05.2010 to 28.05.2010	C-DAC, Hyderabad
4.	Workshop on Various Network Simulation Tools	22.10.2010 and 23.10.2010	CSI College of Engineering, Ketti.
5.	Workshop on Digital Image Processing Using MATLAB	11.02.2011 and 12.02.2011	National Engineering College, Kovilpatti.
6.	Workshop on Methodologies for Research & Innovations	18.03.2011	National Engineering College, Kovilpatti.

7.	Workshop on RAD	22.09.2011 to	National Engineering College,
		26.09.2011	Kovilpatti.
	C	16.01.2012 to 20.01.2012	MSRIT, Bangalore.
	Workshop on Image Processing Using MATLAB by ITIE Knowledge Solutions, Bangalore.		National Engineering College, Kovilpatti.
	Workshop on Technical Paper Writing Using Latex		Anna University Regional Centre – Coimbatore
	Workshop on Smart Ph.D Planning	11.8.2012	National Engineering College, Kovilpatti
12.	Workshop on Image and Video Processing	1.03.2013 and 2.3.2013	Anna University Regional Centre – Coimbatore
	Seminar on Advancements in Image Processing towards Research		National Engineering College, Kovilpatti.
14.	Workshop on Emerging Trends in Multimedia Application	28-10-2013 To 29-10-2013	Anna University Regional Centre, Coimbatore
	Faculty Enable Management Programme on FP Training Tools & Teaching Methodologies	3-2-2014 To 7-2-2014	M.Kumarasamy College of Engineering, Karur
16.	Seminar on SCADA and its Recent Trends	18-04-2014	National Engineering College, Kovilpatti
17.	Workshop Organized by NBA	7-6-2014	National Engineering College, Kovilpatti
18.	FDP on Service Oriented Architecture	09-06-2014 to 15.06.2014	National Engineering College, Kovilpatti
19.	Workshop on Video Analytics	10.10.2014 To 11.10.2014	MIT, Chennai.

20.	Seminar on DBT sponsored Research Approaches and Contemporary Issues of Functional Genomics, Proteomics & Micro array biological Modeling using machine learning in Bioinformatics Applications	13.11.2014 to 14.11.2014	National Engineering College, Kovilpatti.
21.	ISTE Sponsored Seminar on Empowering Indian Education for Global Expectations	07.11.2014 & 08.11.2014	National Engineering College, Kovilpatti.
22.	Workshop on Statistical Methods-Data Analytics for Researched	07.03.2015 To 08.03.2015	Hotel South Avenue, Tirunelveli.
23.	NPTEL Workshop	13.03.2015	National Engineering College, Kovilpatti.
24	Video Analytics Workshop	18.08.2015 & 19.08.2015	MEPCO SCHLENK ENGINEERING COLLEGE, Sivakasi.
25.	One day Workshop on "INTELLECTUAL PROPERTY RIGHTS & INNOVATIONS"	07.11.2015	National Engineering College, Kovilpatti.
26.	DST and NSTEDB sponsored Two Weeks FDP on "Entrepreneurship"	05.12.2016 to 17.12.2016	EDC Cell, National Engineering College, Kovilpatti.

27.	MHRD, Quality Improvement Programme on "Technology Enabled Teaching Learning Process"	27.05.2017 to 29.05.2017	National Engineering College, Kovilpatti
28.	TEQIP-II Sponsored Two Days Hands-on Training Programme on "IoT Using Raspberry Pi for Engineering Applications"	27.01.2017 to 28.01.2017	Thiagarajar College of Engineering, Madurai.
29.	AICTE Sponsored two weeks FDP on "Data Science Research and Big data Analytics"	11.12.2017 to 23.12.2017	National Engineering College, Kovilpatti
30.	FDP on "Introduction to Python Programming"	01.08.2019 to 03.08.2019	Conducted by ICT Academy at National Engineering College, Kovilpatti
31.	One week FDP on "Database Management System through INFYTQ Platform"	03.08.2020 to 07.08.2020	Online, Conducted by Infosys.
32.	ATAL one Week online FDP on "Artificial Intelligence"	05.10.2020 to 09.10.2020	Indian Institute of Plantation Management , Bangalore.
33.	ATAL one Week online FDP on "Quantum Artificial Intelligence"	24.05.2021 to 28.05.2021	Indian Institute of Information Technology Pune.
34.	National level online FDP on "Innovative teaching strategies and tools in the digital age"	April 24 - 28, 2023	MoE's Institution Innovation Council Institute of Applied Medicines and Research, Ghaziabad.
35.	ATAL one Week FDP on " Applications of AI in Healthcare and Agriculture"	29/01/2024 to 03/02/2024	Navkis College Of Engineering, Hassan, Karnataka

ATAL one Week FDP on "Research Problems, Recent Trends and Future Perspectives of Artificial Intelligence in Image Processing-Tools, Techniques and applications: An industry Perspective"	06/01/2025 to 11/01/2025	Cambridge Institute Of Technology, Bangalore, Karnataka.
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Conferences

NATIONAL CONFERENCE PUBLICATIONS

1.	National Conference on Microwave and Optical Communication	16.04.2009	Server Handoff for Multimedia Using anycast in Mobile	Alagappa Chettiar College of Engineering and Technology, Karaikudi.
2.	National Conference on Modeling, Simulation and Optimization	2.11.2012	Analysis of Video Encryption Techniques	VELS University, Chennai
3.	National Conference on Recent Advances in Communication Systems and Technologies	8.03.2013	Fast Perceptual Video Encryption Using Random Permutation on Modified Co0Efficients	Francis Xavier Engineering
4.	National Conference on Next Generation Technologies in Computing and Communication	05-04-2014		PSNA College of Engineering & Technology, Dindigul
5.	National Conference on Frontiers in Applied Sciences & Computer TEchnology	To 07-03-2015	Enhancing the Secuirty in Image Transmission using Reversible color Transformation Techniques	NIT,Trichy

INTERNATIONAL CONFERENCE PUBLICATIONS

1.	International Conference 08-01-2014 ENIAC'14	Tracking Of Object National Engineering College, in Real-Time Video Kovilpatti Using Active Contour Methods
2.	International Conference 08-01-2014 ENIAC'14	Tunable Encryption Technique of Real Time Videos of CAVLC in H.264/AVC
3.	Second International 26-03-2015 Conference on VLSI Computation, Networking, Drives, Image Processing & System Design	Image Hiding Technique Using Grey Prediction Model & Grey Relational Analysis
4.	International Conference on 23.03.2018 "Applied Soft Computing Techniques"	IoT Based Kalasalingam University, Incessant Srivilliputtur. Surveillance System
5.	International Conference on 23.03.2018 "Applied Soft Computing Techniques"	Vehicle Monitoring Kalasalingam University, System In Smart Srivilliputtur. Cities
6.	International Conference on 12.03.2020 Innovations in Engineering, Science and Technology.	Imperceptible and Secure Blind Image Watermarking Using SS Scheme With Adaptive Embedding Strength
7.	International E-Conference on 31.03.2021 Recent Advances in Computation, Communication, IoT and AI.	Driver's M.Kumarasamy College of Engineering, Karur. Detection System

8.	3rd International Conference on Electronics and Sustainable Communication Systems (ICESC)	Secure Cloud-based E-Health System using Advanced Encryption Standard	Hindusthan Institute of Technology, Coimbatore.
9.	3rd International Conference 17.04.2022 on Electronics and Sustainable Communication Systems (ICESC)	NLP Based Fake News Detection Using Hybrid Machine Learning Techniques	Hindusthan Institute of Technology, Coimbatore.
10.	9th International Conference on 17.03.2023 Advanced Computing and Communication Systems (ICACCS).	Spatiotemporal Anomaly Object Detection using EC ² For real time surveillance video	Sri Eshwar College of Engineering, Coimbatore
11.	IEEE sponsored 2024 International Conference on Cognitive Robotics and Intelligent Systems (ICC - ROBINS)	Infrared Small Object Detection Using Hybrid Augmented Intensity And Density Based Clustering	KPR Institute of Engineering and Technology, Coimbatore,
12.	IEEE sponsored 2024 17.04.2024 International Conference on Cognitive Robotics and Intelligent Systems (ICC - ROBINS)	Real-Time Video Security Using Selective Encryption	KPR Institute of Engineering and Technology, Coimbatore,
13.	3rd International Conference on 06.04.2025 Intelligent Data Communication Technologies and Internet of Things (IDCIoT 2025)	A K-Medoids- Based Framework for Traffic Monitoring in Low Illumination Conditions	Reva University, Bangalore, Karnataka.
14.	International Conference on Information and Communication Systems 4 th – 5 th Feb - 2025	1 * *	Vidyavardhaka College of Engineering, Mysuru, Karnataka

JOURNAL PUBLICATIONS

Scopus Publication – 6

- S. Ashwinkumar, S. Rajagopal, V. Manimaran, "Automated plant leaf disease detection and classification using optimal MobileNet based Convolutional Neural Networks", Materials
 Today: Proceedings- Elsevier, 2021. DOI: https://doi.org/10.1016/j.matpr.2021.05.584
- S.Rajagopal, Mr.B.Dharangan, Mr.J.Praveen, "Secure Cloud Based E-Health System Using Advanced Encryption Standard", Publisher: IEEE Xplore, 2022.

DOI: <u>10.1109/ICESC54411.2022.988550</u>

• S.Rajagopal, Swornamalya.M. N, Kalishwari Meena. V, "NLP Based Fake News Detection Using Hybrid Machine Learning Techniques", Publisher: IEEE Xplore, 2022.

DOI: <u>10.1109/ICESC54411.2022.9885679</u>

- S.Rajagopal, Aarthy R, Viranth D, "Spatiotemporal Anomaly Object Detection Using Edge Cloud Collaborative For Real-Time Surveillance Video", Publisher: IEEE Xplore, 2023.
 DOI: 10.1109/ICACCS57279.2023.10112775
- SakthiKumar K, Mariyappan R, Sundarraj M, **Rajagopal. S**, "Real-Time Video Security using Selective Encryption", Publisher: IEEE Xplore, May 2024.

DOI: 10.1109/ICCROBINS60238.2024.10534015.

Sri Sutharsan V M, Kishore Kumar C, Karthik Kallapiran T, Rajagopal S, "Infrared Small
Object Detection using Hybrid Augmented Intensity and Density based Clustering", Publisher:
IEEE Xplore, May 2024, DOI: 10.1109/ICC-ROBINS60238.2024.10533933.

SCI Publications – 6

- S. Rajagopal, A. Shenbagavalli, "Design of Real Time Video Encryption System Based on Adaptive Elastic Motion Model in H.264", Journal of Computational and Theoretical Nano science. Vol.13, No.16, 2016. **DOI:** 10.1166/jctn.2016.5685.
- Rajagopal.S, Shenbagavalli. A., "Optimal ECC-based signcryption algorithm for secured video compression process in H.264 encoder", International Journal of Biomedical Engineering and Technology, Vol. 32, No. 1, 2020. **DOI**: 10.1504/IJBET.2017.10011678.
- S. Rajagopal, T. Ramakrishnan, S. Vairaprakash, "Anatomical Region Detection Scheme Using Deep Learning Model in Video Capsule Endoscope", Intelligent Automation & Soft Computing, Vol. 34, No.3, 2022. **DOI**: https://doi.org/10.32604/iasc.2022.024998.
- S. Rajagopal, M.Sundar Prakash, Balaji, B., Sivakumar, P.Thenmozhi, "Implementation of Deep Learning Techniques Based Artificial Intelligence for Healthcare Data Records", Journal of Electrical Engineering &Technology, Vol & No.19 & 5, 2024. **DOI:** https://link.springer.com/article/10.1007/s42835-023-01777-5.
- S. Rajagopal, M.Uma Devi, G.Maria Jones, M.Gomathy Nayagam, "Ensemble Random Forest based Gradient Optimization based Energy Efficient Video Processing System for Smart Traffic Surveillance System", IETE Journal of Research, Vol & No. 70 & 9, 2024. DOI: https://doi.org/10.1080/03772063.2024.2350927.
- Sankarasubbu Rajagopal , Sundaram Sankar Ganesh, Alagar Karthick , Thangavel Sampradeepraj, "Environmental water quality prediction based on COOT-CSO-LSTM deep learning", Environmental Science and Pollution Research, Vol. & No.31 & 42, 2024. DOI: https://doi.org/10.1007/s11356-024-34750-4.