

## Faculty Profile

**Dr.R.Poonkuzhali M.C.A., M.E., Ph.D,**

Professor and Head,  
Department of Information Technology,  
K.S.Rangasamy College of Technology,  
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### Academic Experience

Teaching Experience : 27 years 3 months

### Academic Achievement

ATAL FDP organized : 1  
National Conference organized : 1  
Membership in Professional Bodies : 2  
Short Term Training Program Organized : 1  
One credit course conducted : 1  
Book Published : 1  
International Journals Publication : 14  
National Journal Publication : 8  
Patents Published : 2

### Academic Qualification

S.No	Degree	University	Class	Year of passing
1.	<b>Ph.D</b> (Information and communication Engineering)	Anna University, Chennai	Completed	Jan 2016
2.	<b>SET</b> (Computer Science)	Mother Teresa Womens University, Kodaikanal	Passed	Mar 2016
3.	<b>M.E.</b> (Computer Science and Engineering)	Anna University, Chennai	First class	May 2004
4.	<b>M.C.A.</b> (Computer Applications)	Madras University, Chennai	First class	May 1997
5.	<b>B.Sc.</b> (Computer Science)	Madras University, Chennai	First class	Mar 1994

### Computer Proficiency

Research Specialization	Subject specialization
MANET	Python Programming

Cloud Computing Data Science	C# and .NET Framework Object oriented Programming Fundamentals of Programming Computer Architecture Computer Networks Component Based Technology
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### **Membership in Professional Bodies**

- Life member – ISTE
- Nominee member – CSI

### **Major Position Held**

- Head of Information Technology Department
- Institution IQAC Coordinator
- National Board of Accreditation Department Coordinator
- Expert Member in Standing Committee Meeting
- BOS Member
- ISO Coordinator, Auditor
- Internal Academic Auditor
- Member Question paper Setting Committee – Sri Ramakrishna College of Engineering (Autonomous), Kongu Engineering College (Autonomous), Sona College of Technology(Autonomous),Kumaraguru College of Technology (Autonomous)
- CSI Faculty Advisor
- Chairman for Class Committee meeting

### **Paper Published in Refereed Journal**

#### **International / National Journals**

1. Dr. Poonkuzhali Ramadoss, Mr. Vasanth Ananth, Mr. Ajay Pranav Manickam Karthikeyan,” Artificial Intelligence Technology and the Shift toward Ecology - Analysis and Critique”, MAHSA International Journal of Engineering and Technology Volume 04, Issue 02, 2024 e-ISSN: 2811-3888
2. Singh, S., Poonkuzhali, R., Nithya, G., ...Kartigeyan, J., Ramya, S., "Enhanced Particle Swarm Optimization based Node Localization Scheme in Wireless Sensor Networks”, Proceedings - International Conference on Augmented Intelligence and Sustainable Systems, ICAISS 2022, 2022, pp. 1019–1024
3. R.Poonkuzhali, K.Gayathiri, D.Deepak Raj, P.Iragul ,”Salient Region Detection Pixel Evaluation Approach Using Medical Images” Journal of Population Therapeutics and Clinical Pharmacology (ISSN 2561-8741) DOI <https://doi.org/10.47750/jptcp.2023.30.07.032>
4. Dr.R.Poonkuzhali, Pradeep K, Vijay V, Vivek Rao S 2021,” Equalized Secured Preserving Protocol for High Cloud Network”, International Research Journal of Modernization in Engineering Technology and Science,Vol. 3,Issue 4,pp1182-1189. ISSN no. 2582-5208
5. Dr.R.Poonkuzhali , V Anusuya, S Arul Nandhini, K Dhivya, 2021,” Healthcare Monitoring and Medicine Reminder for Alzheimer Disease Patient” International Research, Journal of Modernization in Engineering Technology and Science,Vol. 3,Issue 4,pp1207-1210. ISSN no. 2582-5208

6. Dr.R. Poonkuzhali, Devina B, Gomathi R, Sri Annalakshmi N 2019,“Privacy Preserving Wireless Medical Data on Cloud” Eleyon-South Asian Journal of Engineering and Technology, Vol. 8,Issue 2, pp.177-181. ISSN no. 2454-9614
7. Dr.R. Poonkuzhali,2019 “Deep Learning Approaches in Bio Informatics”, Shanlax International Journals, Vol 5, Issue 2, pp. 21-29. ISSN no. 2321-788X.
8. Poonkuzhali, R, Sanavullah, MY, & Sabari, A, 2015, ‘Concurred Relay for Opportunistic Data Forwarding in MANET’, International journal of Advancements in Computing technology. International journal of Advancements in Computing Technology, Vol.7, No.3, pp. 35 – 42. ISSN no. 2005-8039 (Annexure – II 2014, Sl.no. 8532)
9. Poonkuzhali, R, Sanavullah, MY, & Gurupriya, MR, 2014, ‘A Comparative Study of Novel Opportunistic Routing Protocols in Mobile Ad hoc Networks’, International Journal of Computer, Control, Quantum and Information Engineering Vol.8, No.8, pp 1436-1439
10. Poonkuzhali, R, Sanavullah, MY & Sabari, A, 2014, ‘A Pre-emptive Link State Spanning Tree Source Routng Scheme for Opportunistic Data Forwarding in MANET’, International Journal of Mathematical, Computational, Physical and Quantam Engineering Vol. 18, No.4 pp. 06-708
11. Suganya, S, Poonkuzhali, R, & Sanavullah, MY, 2014, ‘An Efficient Approach for Cooperative Routing in MANET’, International Journal of Computer Science & Engineering Technology, Vol. 5, No.3, pp 271-275.
12. Poonkuzhali, R, Sanavullah, MY & Sabari, A, 2014, ‘A Pre-emptive Link State Spanning Tree Source Routng Protocol for Mobile Ad hoc Networks’, Journal of Computer Sceince, Vol. 10, No.1,pp. 85-90. ISSN no.1549-3636 (Annexure – II 2013, Sl.no.9901)
13. Shri Alarmelu V, Poonkuzhali, R, & Sanavullah, MY, 2012, ‘An Efficient Void Handling Technique for Geographic Routing in MANET : A Survey’, International Journal of Advanced Research in Computer Science and Software Engineering, Vol.2, No.12,pp 164-170
14. S Gomathi, R Poonkuzhali, K Duraiswamy,2008,” Routing Protocols for Mobile Ad-hoc Networks Performance Enhancement”, Journal of Computer Applications 1 (4), 38

### Paper Published in Conferences

International Conference	
1.	R Poonkuzhali, S Pavithra, KS Kumar, C Nallusamy,” Heart Disease Prediction Using Machine Learning Techniques”, 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)
2.	R Poonkuzhali, M Karamath, P Sugumaran, M Tharun, S Arun,” Recycling as a Service: IoT Enabled Smart Waste Management System with Machine Learning”, 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)
3.	R Poonkuzhali, JH Paliwal, G Hariharan, R Arasu,” Predictive Power of Logistic Regression in Cryptocurrency Price Analysis”, 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)
4.	R Poonkuzhali, P Suvinkumar, S Vignesh, K Yeswanth,” Utilizing Natural Language Representation For Health Condition Identification Using Clinical Notes”, 2024 2nd International Conference on Artificial Intelligence and Machine Applications Theme: Healthcare and Internet of Things (AIMLA)
5.	Ramados Poonkuzhali., Ananth Vasanth., Navaneetha, M., Oviya, U. “E -Xpert Bot -Guidance and Pest Detection for Smart Agriculture using AI” Proceedings - 2023 12th IEEE International Conference on Communication Systems and Network Technologies, CSNT 2023, 2023, pp. 797–802

6.	Ramados Poonkuzhali., Thilagavathi, A., Sakthisaran, S., Subalakshmi, P. "Intelligent Door Lock System using Ensemble Machine Learning Algorithms", 2023 9th International Conference on Advanced Computing and Communication Systems, ICACCS 2023, 2023, pp. 927–932
7.	Singh, S., Poonkuzhali, R., Nithya, G., ...Kartigeyan, J., Ramya, S., "Enhanced Particle Swarm Optimization based Node Localization Scheme in Wireless Sensor Networks", Proceedings - International Conference on Augmented Intelligence and Sustainable Systems, ICAISS 2022, 2022, pp. 1019–1024
8.	Dr.R.Poonkuzhali, 2023, "Intelligent Door Locking System using Ensemble Machine Learning Algorithms", International Conference on Advanced Computing and Communication Systems,(ICACCS 2023) at Sri Eswar College of Engineering, Coimbatore.
9.	Dr.R.Poonkuzhali, 2022, "Guidance for Smart Agriculture through ChatBot", 6 <sup>th</sup> International Colloquium, K.S.R College of Arts and Science for Women, Tiruchengode.
10.	Dr.R.Poonkuzhali, 2022,"Enhanced Particle Swarm Optimization based Node Localization Scheme in Wireless Sensor Networks", ), International Conference on Augmented Intelligence and Sustainable Systems (ICAISS), CARE College of Engineering, Trichy, India.
11.	Dr.R.Poonkuzhali, 2020,"Avoiding Network Overflow using Elastic Cloud Storage", 6 <sup>th</sup> International Conference on Engineering and Technology, Selvam College of Technology, Namakkal.
12.	R.Poonkuzhali, 2016,Reliable Data Transmission Using Link-Correlation Metric with Opportunistic Routing in Mobile Adhoc Networks, 3 <sup>rd</sup> International Conference on Frontiers of Computational Intelligence –ICFCI'16, K S Rangasamy college of Technology, Tiruchengode.
13.	R.Poonkuzhali,2015, "A Novel Relay Selection Based on RSSI in Opportunistic Forwarding with Source Routing", International conference on Advances in computing, control, communication, automation and structural engineering(ACCAS - 2015), Al-Ameen Engineering college, Erode.
14.	R.Poonkuzhali ,2012,"Energy Efficient Multi Hop Clustering Protocol for Wireless Networks", First International Conference on Computational Intelligence and its Applications Vivekanandha Institute of Engineering and Technology for Women.

#### National Conference

1.	Dr.R.Poonkuzhali, 2019,"Object Detection Using Pre-Trained Model in Tensor Flow", 11 <sup>th</sup> National Conference on Networks, Intelligence and Computing Systems, SNS College of f Technology, Coimbatore.
2.	Dr.R.Poonkuzhali,2019," Privacy Preserving Wireless Medical data on Cloud", 6 <sup>th</sup> National Conference on Emerging Trends in Engineering and Technology, Nandha College ofTechnology, Erode
3.	Dr.R.Poonkuzhali,2018, "Enhancing android app for education system using augmented reality", 4 <sup>th</sup> National Conference on Technological Advancement in Engineering, Sree Narayana Guru College of Engineering and Technology,Kannur, Kerala.
4.	Dr.R.Poonkuzhali,2018, "Internet Of Things Platform as a service-An Android Application", National Conference on New Scientific Creations in Engineering and Technology, Nadar Saraswathi College of Engineering and Technology.
5.	R.Poonkuzhali ,"Efficient and Effective BroadCasting with Guaranteed Coverage in Mobile Adhoc Networks", New Frontiers in Computing, K.S.Rangasamy College of Technology, Tiruchengode

6.	R.Poonkuzhali, “Routing Protocols for Mobile Ad hoc Networks Performance Enhancement”, New Frontiers in Computing, K.S.Rangasamy College of Technology, Tiruchengode.
7.	R.Poonkuzhali, “Enhancement of SIP,RTP and XMPP in the Emerging Real Time Internet”, Vivekanandha Institute of Information and Management, Tiruchengode.
8.	R.Poonkuzhali,” Application of Data Mining in Health care”, Recent Trends in Advanced Computing,S N S College of Technology,Coimbatore.

<b>Patent Published</b>	<p>1. Title of the invention : NATURAL LANGUAGE PROCESSING BASED PATIENT MEDICAL CONDITIONS ASSESSMENT SYSTEM Application No.202141013638 A Publication Date : 02/04/2021</p> <p>2. Title of the invention : BITCOIN PRICE PREDICTION USING MACHINE LEARNING Application No. 202141055559 Publication Date : 10/12/2021</p>
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### List of Certifications

S.No.	Title	Organization	Duration
1.	AI for Beginners	HP Foundation	
2.	LITE - Development 101 – Getting Started with Java Script	Pupil first	
3.	Cyber Security and Privacy	NPTEL	12 weeks
4.	Accreditation and Outcome Based Learning	NPTEL	8 weeks
5.	GuruCool Program (Training on Emerging Technologies followed by a Project Build-a-Thon)	IBM	6 days
6.	Python Boot Camp: From Zero to Hero	Udemy	21.5 Hours
7.	Digital Teaching Techniques	ICT Academy	6 days
8.	Joy of Computing Python	NPTEL	12 weeks
9.	Elements of AI	University of Helsinki	2 ECTS credits
10	Python for Data Science	NPTEL	8 weeks
11	C++ Certified Trainer	ICT Academy	---
12	Problem solving through programming in C	NPTEL	12 weeks
13	Demystifying networks	NPTEL	8 weeks

### Workshops / Seminar / STTP/FDPs Organized

S.No.	Title	Venue	Duration	Sponsoring Authority
<b>Workshop</b>				
1.	ATAL FDP on “Block Chain Technology with AI for Next Generation	K.S.Rangasamy College of Technology, Tiruchengode.	6 Days	ATAL ACADEMY - AICTE

	Computing”			
2.	DREAM BIG	K.S.Rangasamy College of Technology, Tiruchengode.	1 Day	-
3.	Game Development	K.S.Rangasamy College of Technology, Tiruchengode.	1 Day	-
<b>STTP</b>				
1.	Block Chain and Artificial Intelligence towards the next big Technological Revolution	K.S.Rangasamy College of Technology, Tiruchengode.	6 Days	AICTE
<b>Guest Lecture</b>				
1.	Deep Learning	K.S.Rangasamy College of Technology, Tiruchengode.	1 Day	
2.	MongoDB	K.S.Rangasamy College of Technology, Tiruchengode.	1 Day	
<b>One Credit Course</b>				
1.	Apache-Cassandra	K.S.Rangasamy College of Technology, Tiruchengode	3 Days	

### Workshop/SDP/FDP/Training Programme Attended

<b>Faculty Development Programme</b>				
<b>S.No.</b>	<b>Title</b>	<b>Venue</b>	<b>Duration</b>	<b>Sponsoring Authority</b>
1.	Cyber Security and Privacy	NPTEL – IIT Madras	12 weeks (Jul-Oct 2024)	KSRCT
2.	Demystifying Networking	NPTEL – IIT Madras	4 weeks (Jul – Aug 2023)	KSRCT
3.	Data Analyst	Andhra Pradesh state Skill Development Corporation	19 <sup>th</sup> to 23 <sup>rd</sup> June 2023	-
4.	GPU Architectures and Programming	NPTEL – IIT Madras	Jan – Apr 2023	KSRCT
5.	Artificial Intelligence and Data Science in Image Analysis	CMR Institute of Technology, Bangalore	13 <sup>th</sup> to 17 <sup>th</sup> Feb 2023	-
6.	Accreditation and Outcome Based Education	NPTEL – IIT Madras	Aug – Oct 2022	KSRCT
7.	Artificial Intelligence & Robotic Process Automation	KL Electronics and Computer Engineering, Vijayawada	12 <sup>th</sup> to 17 <sup>th</sup> Sep 2022	-

8.	Amazon Web Services	Megha Institute of Engineering and Technology for Women, Telangana	22 <sup>nd</sup> to 27 <sup>th</sup> Aug 2022	-
9.	Android Development with Kotlin	ICT Academy	26 <sup>th</sup> to 30 <sup>th</sup> July 2021	-
10.	Inculcating Universal Human Values in Technical Education	AICTE, New Delhi	10 <sup>th</sup> to 14 <sup>th</sup> Aug 2020	
11.	Evolution of IoT and its Real Time Applications	Malla Reddy Institute of Technology and Science, Hyderabad	13 <sup>th</sup> to 17 <sup>th</sup> July 2020	-
12.	Recent Trends in Communication and Wireless Networks	KKR & KSR Institute of Technology and Sciences	5 <sup>th</sup> to 9 <sup>th</sup> Jun 2020	
13.	Recent Advances in Pattern Recognition- Artificial Intelligence Models and Analysis in Biometrics	K.S.Rangasamy College of Technology, Tiruchengode	25 <sup>th</sup> Mar to 6 <sup>th</sup> Apr 2013	AICTE
14.	Component Based Technology	SSN College of Engineering, Chennai	29 <sup>th</sup> Nov to 4 <sup>th</sup> Dec 2004	
15.	A Practical Approach to Software Engineering	Anna University, Chennai.	17 <sup>th</sup> Sep to 29 <sup>th</sup> Sep 2001	
16.	Blended Learning and Flipped Class room	Vellore Institute of Technology	5 Days	AICTE ATAL

Workshop				
S.No.	Title	Venue	Duration	Sponsoring Authority
1.	Transformation Through NAAC Accreditation Process National Workshop for Higher Educational Institutions	Institute for Academic Excellence, Hyderabad	21 <sup>st</sup> & 22 <sup>nd</sup> June 2021	KSRCT
2.	Awareness Workshop – NIRF India Rankings	Institute for Academic Excellence, Hyderabad	18 <sup>th</sup> and 19 <sup>th</sup> Jan 2021	KSRCT
3.	J Gate - An Electronic Gateway for research	Central Library, KSR College of Engineering, Tiruche Ngode	10 <sup>th</sup> Jul 2019	
4.	BigData – Spark	K.S.Rangasamy College of Technology, Tiruchengode.	15 <sup>th</sup> to 17 <sup>th</sup> Mar 2019	
5.	Introduction to Design of Algorithms	IIT Karagpur ICT MHRD	27 <sup>th</sup> Apr - 30 <sup>th</sup> May 2015	

6.	Pedagogy for Effective use of ICT In Engineering Education	IIT Bombay ICT MHRD	5 <sup>th</sup> to 31 <sup>st</sup> Jan 2015	
7.	Research Aspects of M2M Technology and Wireless Sensor Networks in Space Communication	K.S.Rangasamy College of Technology, Tiruchengode.	30 <sup>th</sup> Nov to 1 <sup>st</sup> Dec 2012	Defence Research and Development Organization
8.	Journal, Thesis and Project Proposal Writing	K.S.Rangasamy College of Technology, Tiruchengode	7 <sup>th</sup> Apr 2012	
9.	Cloud Computing and its Research Applications	KSR College of Engineering, Tiruchengode	28 <sup>th</sup> Jan 2011	
10.	Research in Computer Science-Issues and Challenges	K.S.Rangasamy College of Technology, Tiruchengode	17 <sup>th</sup> Apr 2010	
11.	Recent Trends in Information Security	K.S.Rangasamy College of Technology, Tiruchengode	31 <sup>st</sup> Jan 2019	
12.	Algorithms in Image Processing	Velalar College of Engineering and Technology , Erode	6 <sup>th</sup> Sep 2008	
13.	Train the Trainer Program on Analytical Applications	Infosys Technologies Ltd, Chennai	6 <sup>th</sup> to 8 <sup>th</sup> June 2007	
14.	Component Based Technology	SSN College of Technology	29 <sup>th</sup> to 4 <sup>th</sup> December	Anna University

Seminar				
S.No.	Title	Venue	Duration	Sponsoring Authority
1.	Webinar on Internet of Things – Industrial Perspective	Bharathi Vidyapeeth's Institute of Computer Applications and Management	11 <sup>th</sup> Jul 2020	
2.	Mathematics for Data Science and Business	Kumaraguru College of Technology	3 <sup>rd</sup> Jul 2020	
3.	Outcome Based Education Software	vmedulife Software services	11 <sup>th</sup> Jun 2020	
4.	Scope of Cyber Security	Jepiaar Institiute of Technology	14 <sup>th</sup> May 2020	
5.	Challenges in Cyber Security	Savitha Engineering College	14 <sup>th</sup> May 2020	
6.	Data visualization and R-Programming	Codgnan IT Solution	15 <sup>th</sup> May 2020	



7.	Tier 1 Social, Emotional and Behavioral Supports to Restart Learning During a Crisis	EdWeb.Net, New Jersey	6 <sup>th</sup> Feb 2020	
8.	Software Project Management	K.S.Rangasamy College of Technology, Tiruchengode	24 <sup>th</sup> Aug 2012	ICT Academy
9.	An Intelligent Based Wireless Ad Hoc and Sensor Networks and its Applications with Ocean Technology	K.S.Rangasamy College of Technology, Tiruchengode	19 <sup>th</sup> & 20 <sup>th</sup> Aug 2011	Ministry of Earth Sciences
10.	Research Perspectives on Mobile Adhoc Network	Velalar College of Engineering and Technology, Erode	4 <sup>th</sup> & 5 <sup>th</sup> Mar 2011	CSIR, New Delhi
11.	Research Challenges of Data Security in Grid and Cloud Computing	K.S.Rangasamy College of Technology, Tiruchengode	19 <sup>th</sup> & 20 <sup>th</sup> Mar 2010	CSIR, New Delhi
12.	Software Quality Assurance	Bannari Amman Institute of Technology, Sathyamangalam	15 <sup>th</sup> Sep 2006	NASSCOM

#### STTP

1.	Introduction to Design of Algorithms	IIT Karagpur	33 days	MHRD
2.	Pedagogy for Effective use of ICT In Engineering Education	K.S.Rangasamy College of Technology, Tiruchengode	25 days	MHRD
3.	Recent Advances in Pattern Recognition- Artificial Intelligence Models and Analysis in Biometrics	K.S.Rangasamy College of Technology, Tiruchengode	13 days	AICTE
4.	A Practical Approach to Software Engineering	Anna University	13 days	Anna University

#### Award & Recognitions -100% Result Produced

- Appreciation from Google cloud for facilitating students in Google Cloud Career Launchpad
- NPTEL Discipline Star
- Faculty Guide in Niral Thiruvizha (Hackathon) Competition
- Mentor for Dark Patterns Buster Hackathon IIT Banaras Hindu University
- Acted as reviewer in IEEE conference IIT Delhi, International Conference VIT-AP
- ELITE with Silver awarded NPTEL certification in Accreditation and Outcome Based Education

- ELITE awarded NPTEL certification in Problem solving through programming in C, Python for Data Science, Data Analytics with Python , GPU Architectures and Programming and Demystifying Networking
- ICT Academy Certified Trainer in C++ Programming
- Got 100% result in C# and .NET, Cloud computing, Distributed Component Architecture Fundamentals of Programming, Object Oriented Programming