



# Sri Ramakrishna Institute of Technology

(An Autonomous Institution)


(Accredited by NAAC with "A" Grade)

Pachapalayam, Perur Chettipalayam, Coimbatore – 641 010

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## Faculty Profile

<b>Full name with Qualification, Designation and Department:</b>  <b>Ms.R.Kanmani ,B.E., M.Tech.,</b> Assistant Professor (Senior Grade), Electronics and Communication Engineering					
Date of birth	:	02-07-1986	Gender	:	Female
Nationality	:	Indian	Marital status	:	Married
Address for correspondence	:	A-25, Cheran Managar, Vilankurichi Road, Coimbatore - 641035	Permanent address	:	A-25, Cheran Managar, Vilankurichi Road, Coimbatore - 641035
Mobile no	:	9442587334	e-mail (official)	:	<a href="mailto:kanmani.ece@srit.org">kanmani.ece@srit.org</a>
Landline	:	-	e-mail (personal)	:	<a href="mailto:kanmanivan@gmail.com">kanmanivan@gmail.com</a>
Date of joining	:	07-01-2013	Post of joining	:	Lecturer
No of promotions since D.O.J	:	1	Present post	:	Assistant Professor(Senior Grade)
Present pay scale	:	Rs.15,600 – Rs,39,100 AGP: 7,000	Gross pay	:	Rs.41,257
Employer ID	:	TE160	Bank account No. (Salary credited)	:	500101010583989
P.F. No	:	TN/CBE/56764/583	Group Insurance No	:	170100/48/13/42/00001717
PAN Number	:	BOHPK4229M	Aadhar Number	:	329661548679
AICTE ID	:	1-1561469050	AICTE Institution ID	:	1-7841521

**Educational Qualification**

Degree	Specialization	Year of Passing	Name of the College	Name of the University	Class Obtained
UG	Electronics and Communication Engineering	2007	P.R.Engineering College	Anna University	I
PG	Advanced Communication Systems	2009	SASTRA University	SASTRA	I
Ph.D	Information and Communication Engineering	-	Anna University	Anna University	-
Others					

**Registration for Ph.D. with area of interest:**

Wireless Communication - Certain Investigations on optimization techniques used for Resource Allocation in Wireless Communication System

Year of Ph.D. Registration: January 2017

Year of Ph.D. Completed: -

Thesis Title: -

Supervisor Recognition Number: -

**Ph.D. Scholar Details**

S.No.	Name of the scholar	Registration details	College	Status

**Academic Experience**

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Ramakrishna Institute of Technology, Coimbatore.	Lecturer/ Assistant Professor/Assistant Professor (Sr.Gr)	07/01/2013	-	10	10	9
Kings College of Engineering, Punalkulam, Pudukkottai.	Assistant Professor	26/06/2009	04/07/2012	03	-	08
<b>Total</b>				<b>13</b>	<b>10</b>	<b>17</b>

**Industrial Experience**

Name of the Organisation	Designation	Nature of Work	Joining Date	Relieving Date	Experience		
					Years	Months	Days
Nil							
Total							

**Courses Handled**

Academic Year	Semester	Course Code	Course Name	Type of Course (T / L)	Pass Percentage
2022-2023	IV	20EC009	Transmission Lines and Waveguides	T	72.53
2022-2023	VII	UECC015	RF and Microwave Communication	T	92.5
2022-2023	V	20EC017	Analog Communication Laboratory	L	91.43
2021-2022	VI	UECC102	Optical Communication	T	88
2021-2022	VI	UECC104	Principles of Satellite Communication	T	85
2021-2022	VI	UECC102	Optical Communication	T	92
2021-2022	III	20EC003	Digital Electronics	T	100
2020-2021	VII	UECE109	Cryptography and Network Security	T	100
2020-2021	I	20EEG01	Basic Electrical and Electronics Engineering	T	87
2020-2021	II	20MEG02	Engineering Workshop	L	100
2019-2020	V	UECC010	Digital Communication	T	91.04
2019-2020	III	UITC004	Principles of Communication	T	82
2018-2019	V	EC6503	Transmission Lines and Waveguides	T	79
2018-2019	VII	EC6702	Optical Communication Networks	T	91
2018-2019	IV	UECC006	Communication Theory	T	59
2017-2018	II	PCOC008	Microwave Integrated Circuits	T	100
2017-2018	VII	EC6712	Optical and Microwave Lab	L	100
2017-2018	VII	EC6701	RF and Microwave Engineering	T	79.54
2016-2017	IV	EC6411	Circuits and Simulation	L	100

			Integrated Laboratory		
2016-2017	IV	EC6402	Communication Theory	T	84
2016-2017	VII	EC6712	Optical and Microwave Laboratory	L	100
2016-2017	III	CU7301	Advanced Satellite Based Systems	T	66.67
2015-2016	II	CU7202	MIC and RF System Design	T	100
2015-2016	VI	EE2356	Microprocessor and Microcontroller Lab	L	96
2015-2016	VI	EE2354	Microprocessor and Microcontroller	T	93
2014-2015	VII	EC6701	RF and Microwave Engineering	T	88
2013-2014	II	EC6211	Circuits and Devices Lab	L	94
2013-2014	II	CU7202	MIC and RF System Design	T	73
2013-2014	V	EC2306	Digital Signal Processing Lab	L	99
2013-2014	V	EC2305	Transmission Lines and Waveguides	T	75.38
2012-2013	II	EC2151	Electric Circuits and Electron Devices	T	91.83

### Projects Guided

Academic Year	Semester	Project Title	UG / PG
2022-2023	VIII	Vehicle Engine Health Monitoring Using Sensor Nodes with Bluetooth	UG
2021-2022	VIII	IOT Based Social Distance Monitoring	UG
2021-2022	VIII	Vehicle Tracking and Accident Detection System Using GPS and GSM Module	UG
2020-2021	VII,VIII	IOT Based Pesticides Monitoring System in Food Products	UG
2019-2020	VIII	Design of IOT Based Coal Mine Monitoring System	UG
2019-2020	IV	Data Aggregation Using Pegasus in Wireless Sensor Network	PG
2018-2019	VIII	Implementation of Li-Fi in Intervehicular communication for accident avoidance	UG
2017-2018	VIII	Unmanned Moving Vehicle for detection of Gas leakage and Pollution using IoT	UG
2016-2017	VIII	IOT Based Toll Booth Management System	UG
2014-2015	VIII	Driver's Drowsiness Detection System using Bio-	UG

		signals and Tracking the Vehicle Using GPS System	
2013-2014	VIII	Unmanned moving Vehicle for Ground target and an analysis of video using Genetic Algorithm	UG

## Publications

Publications	SCI / Scopus / Web of Sciences	Others
Journal	3	7
Conferences	1	3

### Journal Publications (IEEE format)

R.Kanmani,Dr.S.Mary Praveena, M.Saravanakumar,” Optimal Resource Allocation in Coordinated Multi-Cell Systems for Green Communications and Networking”, European Chemical Bulletin, Volume12,Issue5, May 2023.

S.Mary Praveena ,A.K.Kavitha, R.Kanmani,” A Neuro Fuzzy Image Fusion using Block based Feature Level Method”, International Journal of Informatics and Communication Technology,Volume9,Issue3, December 2020.

S Mary Praveena, R Kanmani, AK Kavitha,” Analysis and Identification of Tumor Cells In MRI And CT Images Based On Nanotechnology Using Neuro Fuzzy Image Fusion”, IOP Conference Series: Materials Science and Engineering,Volume 932, Issue1, September 2020.

R.Akshaya,T.Deepika,P.K.Lekshmi,R.Kanmani ”Implementation of LiFi in Intervehicular communication for accident avoidance”, Iconic Research and Engineering Journals, Volume2,Issue 10, April 2019.

N.Elavarasi,M.Geethanjali,R.P.Indhuja,R.Kanmani “Unmanned moving vehicle for detection of Gas leakage and pollution using IOT”, Journal on Science Engineering and Technology, Volume 5, No.02, April 2018.

R.Kanmani,A.K.Kavitha,Dr.S.Mary Praveena “Survey on Optimization Techniques used for Resource Allocation in Wireless Communication System” International Journal of Scientific Research in Science and Technology Volume (3), issue (8), Dec 2017.

Ms.D.Binu,R.Gayathri,R.Lavanya,R.Kanmani, “Thermoelectric Power Generation Using Solar Energy” International Journal for Scientific Research & Development (IJSRD), volume (5), issue (3), 2017.

Dr.S.Mary Praveena,A.K.Kavitha,R.Kanmani “IoT Based Advanced Rescue Management System” International Journal of Advanced Research Trends in Engineering and Technology (IJARTET), volume (4), issue (5), May – 2017.

Dr.S.Mary Praveena,A.K.Kavitha,R.Kanmani,“Energy Conservation in Smart Home Using Wireless Sensor Network” International Journal of Trend in Research and Development, volume (4),issue (1), Jan – Feb 2016.

L.Malathi,L.J.Arthiha,R.Kanmani “FPGA Implementation of Reduced Memory using Reduced Scalable Encryption Algorithm” published in the International Journal of Electronics Communication & Computer Engineering (IJECCCE), March-April 2013

#### **Conference Publications (IEEE format)**

R.Kanmani,Dr.S.Mary Praveena, S.Gayathri, “Resource Allocation Techniques for OFDMA using water filling algorithm” in AICTE sponsored “International conference on communication and computing technologies for sustainable development” organized by Department of ECE, Sri Krishna College Of Technology, Coimbatore, during February 25th and 26th , 2022.

R.Kanmani “ Unmanned moving vehicle for Detection of Gas leakage and Pollution using IoT ” in the International Conference on Information and Computational Science” organized by K.S.R. College of Engineering during 27th – 28th , March 2018.

R.Kanmani “ IoT Based Toll Booth Management System ” in the National Conference on Emerging Technologies in Computing Sciences” organized by SNS College of Engineering during 18, March 2017.

R.Kanmani “ Spatial Layout image Retrieval using Embedded Processor ” in the National Conference on “ Science Research and Information Technology” organized by PG Engineering Association at Sri Ramakrishna Institute of Technology during 18, March 2015.

#### **Books / Book Chapters (IEEE format)**

1.Dr.S.Mary Praveena, R.Kanmani, R.Ramakrishnan,”Image and Text Dissemination Using Li-Fi Technology”, Advances in Electronics and Communication Engineering,Volume 5, ISBN: 978-93-5570-628-7, 2023.

2.Dr.S.Mary Praveena, R.Kanmani, R.Ramakrishnan,”Channel Estimation for MIMO Systems, Emerging Trends in Engineering and Technology,Volume 5, Integrated Publications, New Delhi, 2022.

3.R.Kanmani, Dr.S.Mary Praveena, R.Rakhul, R.Sakthivel, S.Sharjeel,”Vehicle Tracking and Accident Detection System Using Mobile App“, Recent Trends in Multidisciplinary Research, Volume 33, Akinik Publications, New Delhi, 2022.

4.Dr.S.Mary Praveena, R.Kanmani, A.K.Kavitha“Optical Amplifiers in Broadcast Networks" has been accepted for publication in the book under the working title Optical Amplifiers, Intec Open Limited, London, ISBN 978-953-51-5950-6.

5.Dr.H.Mangalam,Dr.S.Mary Praveena.R.Kanmani,A.K.Kavitha,Mr.V.Ganesh “Optical and Microwave Laboratory Manual”, Notion Press, 2019.

#### **Sponsored Research**

Project Title	Funding Agency	Amount Rs.	Duration
Design and Development of Water Quality Monitoring System for Aquaculture using Light	SRIT-RPS	50,000.00	One Year

Fidelity (Li-Fi) Technology			
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#### Consultancy

S. No.	Organization/ Agency	Nature of Work	Amount in Rs.	Year
Nil				

#### Workshops / Seminars attended

- 1.Participated in one day workshop on “Moodle Learning Management System” conducted by IIT Bombay, through remote centers at KIT – Kalaingar Karunanidhi Institute of Technology on 15, March 2019.
- 2.Participated in one day National level seminar on “Research Issues and challenges in MIMO-OFDM for Wireless Communications” conducted by the Department of Electronics and Communication Engineering at Bannari Amman Institute of Technology on 9, June 2018.
- 3.Participated in the 2 days Hands-on “TI MSP430 Embedded System Workshop” conducted jointly by Texas Instruments, Bangalore and STEPS Knowledge services during 21st to 22nd November 2016 at Sri Ramakrishna Institute of Technology.
- 4.Participated in one day hands on workshop on “Industrial Automation” conducted by the Department of Electrical and Electronics Engineering at Sri Ramakrishna Institute of Technology during 14, November 2013.

#### Faculty Development Program attended (from recent)

- 1.Participated in Three days International Faculty Development Programme on “Disruptive Technologies for Next Gen Computing” Organized by Department of ECE Sri Krishna College of Technology, Coimbatore from 14 - 16, December 2022.
- 2.AICTE-ISTE SPONSORED INDUCTION/REFRESHER PROGRAM ON "Innovative Teaching & OBE" (From 07.02.2022 to 12.02.2022) organized by Dhirajlal Gandhi College of Technology, Salem, Tamilnadu through Online mode.
- 3.AICTE – ATAL FDP on “Devices for Modern Wireless Communication System” from 20.09.2021 to 24.09.2021organized by School of Studies in Engineering and Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur.
- 4.Attended AICTE Sponsored FDP Slot-I on “Research Challenges in Wireless Communication and Networks” organized by Department of ECE, Sri Ramakrishna Institute of Technology from 25.01.2021 to 07.02.2021.
- 5.Attended AICTE online workshop on Universal Human Value on the theme “Inculcating Universal Human Values in Technical Education” during 19 - 23 October 2020.

6. Attended ATAL FDP on “Precision Health Technology” from 14.12.2020 to 18.12.2020 organized by Thiagarajar College of Engineering.
7. Attended ATAL FDP on “Smart Cities” from 07.12.2020 to 11.12.2020 organized by Lendi institute of Engineering and Technology.
8. Participated and Successfully completed the online workshop on Universal Human Value on the theme “Inculcating Universal Human Values in Technical Education” during 19-23 October 2020 organized by AICTE.
9. Attended ATAL FDP on “Flexible and Wearable Antennas: Recent Advancements, Fabrication Techniques and Applications” from 12.10.2020 to 16.10.2020 organized by National Institute of Technical Teachers Training and Research.
10. Attended ATAL FDP on “Internet of Things” from 05.10.2020 to 09.10.2020 organized by Babasaheb Bhimrao Ambedkar University.
11. Participated in TEQIP - III Faculty Development Programme on Emerging Networking Technologies and Tools – Research Perspective organized by PSG College of Technology, Coimbatore from 07.06.2019 to 13.06.2019.
12. Participated in Short term course titled “Optimization Techniques with Engineering Applications” at Sri Ramakrishna Institute of Technology Remote Centre for National Institute of Technical Teachers Training & Research, Chandigarh during 10 – 14, December 2018.
13. Participated in AU approved Faculty Development Programme on “EC6501 – Digital Communication” Organized by Department of ECE Sri Ramakrishna Institute of Technology during 14 - 21, June 2018.
14. Participated in Faculty Development Programme on “Soft Computing Techniques using MATLAB for Engineering Research” Organized by Department of EEE Sri Ramakrishna Institute of Technology during 9 - 11, August 2017.
15. Participated in Three days Faculty Development Programme on “My Profession, My Commitment, My Life” organized by Department of CSE Sri Ramakrishna Institute of Technology, during 16 – 18 November 2016.
16. Participated in Faculty Development Programme on “Wireless Sensor Networks and its Applications” Organized by Department of EEE National Institute of Technology , Tiruchirappalli during 12 – 16, May 2014.

#### **Events Organized (from recent)**

1. Acted as a Coordinator for organizing “Techathon 23” a project expo event held on 26.10.2023.
2. Acted as Organizing Secretary for an ICMR sponsored two day workshop titled “Machine Learning Techniques for Lifestyle and Related Risk Factors for Chronic Diseases among Adolescent age group Using Translational Research” during 03.04.2019 and 04.04.2019.



3. Acted as Coordinator for organizing a CSIR sponsored workshop titled “Design Challenges in IoT and Machine Learning” during 23.01.2018 and 24.01.2019.

#### **Conference – Nil**

#### **FDP**

Coordinator - AU approved Faculty Development Programme on “EC6501 – Digital Communication” Organized by Department of ECE Sri Ramakrishna Institute of Technology during 14 - 21, June 2018.

#### **Workshops - Nil**

#### **Seminars**

Acted as Coordinator for organizing an ICMR sponsored seminar titled “Awareness on Health, Vaccines, Physical Fitness and Food Habits among adolescent age group” during 09.08.2018 and 10.08.2018.

Acted as Coordinator for organizing an ICMR sponsored seminar titled “Awareness on mobile phone radiation exposure and their ill effects on human beings” during 09.01.2018 and 10.01.2018.

#### **Online Courses Completed**

Sl. No.	Title	Platform
1.	Analog Communication	NPTEL
2.	Introduction to Internet of Things	NPTEL
3.	Accreditation and Outcome Based Learning	NPTEL
4.	Cognition, Transformation and Lives	NPTEL
5.	Leadership	NPTEL
6.	Real Time Operating System	NPTEL
7.	Basics of Software Defined Radio	NPTEL
8.	BEC	Cambridge University
9.	Wireless Communication for Everybody	Coursera
10.	Fundamentals of Network Communication	Coursera
11.	Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials	IIRS
12.	Fundamentals of MIMO Wireless Communication	NPTEL

#### **Awards and Recognitions Secured**

1. Patent: Registered and Published - “Aquaculture Water Quality Monitoring Using Bidirectional Wireless Technology” Design No. 390366-001, Date: 27/09/2023.

2. SRIT Alumni Association – 10 Years of Service

3.Recived Mentor Certificate - A.Kiran Sakthivel and V.JeevithKumar of second year ECE are recognized as a Notable Participant in the IIT Bombay FOSSEE Mapathon 2023 held between 22nd February to 6th May 2023 and mentored by Ms.R.Kanmani, Assistant Professor (Sr.Gr)/ECE.

4.R.Kanmani, V.Raguveer prasath, V.Renuga Devi, Swathi Pradeep,” IoT Based Pesticides Monitoring System in Food Products” won Gold Award in I2CreaTe, organized by Universiti Malaysia Perlis on 16.09.2021.

5.Acted as Resource person for Anna University approved FDTP on EC6501 - Digital Communication and delivered a lecture on “QAM and Carrier Synchronization” conducted at Sri Ramakrishna Institute of Technology during 14.06.2018 to 21.06.2018.

6.Acted as Resource Person in AICTE sponsored FDP Slot-II on “Research Challenges in Wireless Communication and Networks” organized by Department of ECE,SRIT and deliver a lecture titled “Resource Allocation in MIMO-OFDM System” on 16.02.2021.

### **Self-appraisal**

#### **Major Strength**

- Flexible to handle change
- Team work
- Optimistic person

#### **Major Weakness**

- Emotion
- Trustworthy
- Being Straight forward

**Signature**