Faculty Profile

Full name with Qualification, Designation and Department:

Dr. M.Kalpana Devi , M.E., Ph.D.,
Assistant Professor,
Computer Science and Engineering

Date of birth	:	07-01-1981	Gender	:	Female
Nationality	:	Indian	Marital status	:	Married
Address for correspondence	:	No:19/4, Arul Nagar Garden, Kannappanagar, Coimbatore-641027	Permanent address	:	No:19/4, Arul Nagar Garden, Kannappanagar, Coimbatore-641027
Mobile no	:	9367141578 9585561634	e-mail (official)	:	kalpanadevim,it@srit.org
Landline	:		e-mail (personal)	:	lakross6.sidharaj@gmail.com
Date of joining	:	06-06-2019	Post of joining	:	Assistant Professor
No of promotions since D.O.J	:	Nil	Present post	:	Assistant Professor
Present pay scale	:	15,600 – 39,100 & 6000	Gross pay	:	Rs.38,666
Employee ID	:	TE399	Bank account No. (Salary credited)	:	500101010539181
P.F. No	:	TN/CBE/56764/10883	Group Insurance No	:	AG00059675000I03
PAN Number	:	BNZPK7704G	Aadhar Number	:	2518 5178 4839
AICTE ID	:	1-7343929858	AICTE Institution ID	:	1-7841521

Educational Qualification

Degree	Specialization	Year of Passing	Name of the College	Name of the University	Class Obtained
BSc-CT	Applied Science – Computer Technology	2001	PSG College of Technology	Bharathiar University	First Class
MCA	Computer Applications	2004	PSG College of Arts and Science	Bharathiar University	First Class with Distinction
M.Phil	Computer Science	2006	Bharathiar University	Bharathiar University	First Class
M.E	Computer Science and Engineering	2010	Anna University of Technology, CBE	Anna University of Technology	First Class with Distinction
Ph.D	Cognitive Radio Networks	2023	Anna University, Chennai	Anna University, Chennai	Awarded

Registration for Ph.D. with area of interest: Cognitive Radio Networks

Year of Ph.D. Registration: 2017   **Year of Ph.D. Completed:** 2023

Thesis Title: Efficient Utilization for Spectrum Handoff in Cognitive Radio Networks using Optimization Techniques

Supervisor Recognition Number: Nil

Ph.D. Scholar Details

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

Academic Experience

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Ramakrishna Institute of Technology	Assistant Professor	06.06.2019	Till Date	4	5	-
Jansons Institute of Technology	Assistant Professor	15.06.2016	04.06.2019	3	-	-

Sri Krishna Arts and Science College	Assistant Professor	01.06.2015	31.03.2016	-	10	-
Sri Ramakrishna Institute of Technology	Assistant Professor	04.06.2007	30.05.2015	7	11	27
Sri Krishna College of Engineering and Technology	Lecturer	04.08.2006	15.05.2007	-	9	12
Maharaja Engineering College	Lecturer	27.06.2005	25.05.2006	-	10	29
Nehru College of Engineering and Research Centre	Lecturer	20.10.2004	20.04.2005	-	6	-
			Total	17	2	26

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
2019-2020 (ODD)	V	UITG003	Fundamentals of Internet of Things	Theory	84%
	III	UITC001	Data Structures	Theory	93%
2019-2020 (EVEN)	VIII	GE6075	Professional Ethics in Engineering	Theory	100%
	VI	UITE202	Mobile Computing	Theory	100%
2020-2021 (ODD)	I	20ITG01	Programming for Problem Solving using C	Theory	91%
	I	20ITG02	Programming in C Laboratory	Lab	100%
	III	UITC001	Data Structures	Theory	100%
2020-2021 (EVEN)	VIII	UITG003	Fundamentals of Internet of Things	Theory	94%

	II	20CSG01	Object Oriented Programming with C++	Theory	96%
	II	20CSG02	Programming in C++ Laboratory	Lab	100%
2021-2022 (ODD)	III	20ITE06	Introduction to Data Structures	Theory	90%
	III	20IT001	Data Structures	Theory	91%
	III	20IT003	Data Structures Laboratory	Lab	100%
2021-2022 (EVEN)	IV	20IT008	Operating Systems	Theory	86%
	IV	20IT010	Operating System Laboratory	Lab	88%
	VI	UITE202	Mobile Computing	Theory	91%
2022-2023 (ODD)	III	20ITE06	Introduction to Data Structures	Theory	86%
	III	20IT001	Data Structures	Theory	93%
	III	20IT003	Data Structures Laboratory	Lab	100%
2022-2023 (EVEN)	IV	20IT008	Operating Systems	Theory	85%
	IV	20IT010	Operating System Laboratory	Lab	84%
	VIII	UITE229	Software Project Management	Theory	100%
2023-2024 (ODD)	V	20CSP11	Mobile Networks	Theory	
	V	20CSE04	Basics of Internet Programming	Theory	
	I	20ITG02	Programming in C Laboratory	Lab	

Projects Guided

Academic Year	Semester	Project Title	UG / PG
2019-2020	VII & VIII	Preventing Accidents By Enhancing Smart Helmet Using Iot Based Smart System	UG
		IoT Based Smart Home Automation Using Google Assistance	UG

2020-2021		Spectrum Sensing in Cognitive Radio Networks using Zigbee	UG
2021-2022		An Approach for Efficient Real Time Moving Object Detection	UG
		Crop Yield Prediction and Crop Recommendation System using Machine Learning and Deep Learning	UG
2022-2023		Monitoring Nutritional Deficiencies In Plants Using IoT	UG
2023-2024		Face recognition system using CNN	UG
		Image caption generation of text to voice using CNN and LSTM	UG

Publications

Publications	SCI / Scopus / Web of Sciences	Others
Journal	14	
Conferences	3	

Journal Publications (IEEE format)

1. N.Saranya, **M.Kalpana Devi**, A. Mythili, Summia P. H 2023, "Data science and machine learning methods for detecting credit card fraud" , The scientific temper, Vol. 14 No. 03, pp.840-844, ISSN: 0976-8653.

2. **M.Kalpana Devi**, 2023, "Monitoring Nutritional Deficiencies In Plants Using IoT", International journal for science and advance research in technology, vol.9, no.5,pp. 435-439, ISSN. 2395-1052.

3. **M. Kalpana Devi**, K. Umamaheswari, 2021, "Optimization techniques for spectrum handoff in cognitive radio networks using cluster based cooperative spectrum sensing", Wireless Networks- The Journal of Mobile Communication, Computation and Information, vol.27, no.3, pp.2173-2192, DOI: https://d oi.org/1 0.1007/ s11276- 021-025 49-7 , ISSN: 1022-00 38.

4. **M. Kalpana Devi**, K. Umamaheswari, 2021, "Discrete Hughes Hartogs optimized dual vector handoff for spectrum management in cognitive radio networks", International Journal of Communication Systems, vol. 34, no.16, Article e4950, DOI: https:// doi.org/ 10.1002 /dac.49 50, ISSN: 1074-53 51.

5. **M. Kalpana Devi**, K. Umamaheswari, 2020, "Modified Artificial Bee Colony with firefly algorithm based spectrum handoff in cognitive radio network", International Journal of Intelligent Networks, vol.1, no.1, pp.67-75, DOI: https://d oi.org/1 0.1016/j .ijin.202 0.07.00 2, ISSN : 2666-60 30.

6. **M.Kalpana Devi** , 2020, "Preventing Accidents by Enhancing Smart Helmet using IOT Based Smart System", International Journal of Current Engineering and Scientific Research, vol.7,no.10, pp.6-9, DOI:10.21276/ijcesr, ISSN: 2393-8374.

7. **M.Kalpana Devi**, 2020, "Analysis of Spectrum Handoff in Cognitive Radio Network Using Spectrum Binary Particle Swarm Optimization", International Journal of All Research Education and Scientific Methods, Vol.8, no.11, pp. 115-123, ISSN: 2455-6211.

8. **M.Kalpana Devi** , 2020, "IOT Based Smart Home Automation Using Google Assistance", International journal for science and advance research in technology, vol.6,no.3, pp. 367-371, ISSN [Online] : 2395-1052.

9. M. Kalpana Devi, K. Umamaheswari , 2019, "Intelligent process of spectrum handoff for dynamic spectrum access in cognitive radio network using swarm intelligence", International Journal of Computers and Applications, vol. 42, no.12,pp. 1186-1192, ISSN: 1206-212X (Print) 1925-7074 (Online).

10. **M Kalpana Devi**, S Divya Meena, 2016, "A Study Analysis on Various Image Segmentation Techniques and Concerns with Distinct Images", International Journal of Science and Research, Vol. 5,no.7, pp.2078-2081, ISSN (Online): 2319-7064.

11. **M Kalpana Devi**, R Ashwini, 2016, "An Analysis on Implementation of various Deblurring Techniques in Image Processing", International Research Journal of Engineering and Technology, vol.3, no.12, pp.1049-1059, e-ISSN: 2395 -0056.

12. K Kavi Niranjana, **M Kalpana Devi**, 2015, "RGB to lab transformation using image segmentation", International Journal of Advance Research in Computer Science and Management Studies, vol.3, no.11, pp: 8-16, ISSN :2321- 7782.

13. K.Kavi Niranjana , **M.Kalpana Devi** & L.Mary Marshaline, 2012, "Image Segmentation Using MCWS Algorithm", International Journal of Engineering Research and Technology vol. 1, no.7, pp: 1-4, ISSN: 2278-0181.

14. **M.Kalpana Devi**, Vasuki, 2012, "Mobile Phone Monitoring System for Android Operating System", International Journal of Engineering Research and Technology vol. 1, no.7, pp: 1-4, ISSN: 2278-0181.

Conference Publications (IEEE format)

1. M Kalpana Devi, K Umamaheswari, 2021, "Dynamic spectrum access for spectrum handoff in cognitive radio networks using optimization techniques", 2nd EAI International Conference on Big Data Innovation for Sustainable Cognitive Computing: BDCC 2019, pp. 309-316. https://doi.org/10.1007/978-3-030-47560-4_25.

2. M Kalpana Devi, K Prabhu," 2020, "Face Emotion Classification using AMSER with Artificial Neural Networks", 2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS), pp. 148-154, DOI: 978-1-7281-5197-7/20.

3. M Kalpana Devi, K Umamaheswari , 2022, "Optimal Channel Selection using Hybrid Grey Wolf Optimizer with Cuckoo Search for performance enhancement of Spectrum handoff in Cognitive Radio Network", Research Conclave 2022, PSG Tech. (Yet to be published)

Books / Book Chapters (IEEE format) - NIL

Sponsored Research

Project Title	Funding Agency	Amount Rs.	Duration
NIL			

Consultancy

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

Workshops / Seminars attended

1. Participated in two days workshop on "Computer – Aided Diagnosis of Retinal Images(CADR) using Machine Learning Techniques : Innovations and Research Perspectives " organized by Department of CSE, Kongu Engineering College , Perundurai, Erode from 14-06-19 to 15-06-19.

2. Participated in two days seminar on "CSIR "Recent Trends in Cognitive Machine Learning" organized by Department of CSE, Karpagam College of Engineering, Coimbatore, from 29.08.2019 to 30.08.2019.

3. Participated in one day seminar on "CSI – National Level Outcome Based Education", organized by Department of CSE, Sri Shanmugha College of Engineering, Sankari on 18.06.2019.

4. Participated in one day seminar on "Block Chain Technology", organized by Department of IT , PSG College of Technology, coimbatore on 13.10.2018.

5. Participated in two weeks workshop on "Computer Programming", ", organized by ISTE, Sri Ramakrishna Institute of Technology, Coimbatore-10 from 16-06-2014 to 21-06-2014.

6. Participated in two days workshop on "Aakash for Education", organized by ISTE, Sri Ramakrishna Institute of Technology, Coimbatore-10 from 10-11-2012 to 11-11-2012.

7. Participated in one day Workshop on "Need Based Approach for Effective Teaching", organized by SRIT cell, Sri Ramakrishna Institute of Technology, Coimbatore-10 on 21.06.2011.

8. Participated in two days workshop on "Middleware Technologies", ", organized by Department of MCA, Sri Ramakrishna Institute of Technology, Coimbatore-10 from 08-07-2011 to 09-07-2011.

Faculty Development Program attended (from recent)

1. Participated in one week FDP on "Outcome Based Education for Inductee Teachers" organized by Internal Quality Assurance Cell, Sri Ramakrishna Institute of Technology, Coimbatore – 10 from 02.01.2023 to 06.01.2023.

2. Participated in Faculty Development Programme on **OBE** conducted in Sri Ramakrishna Institute of Technology from 28-09-2023 to 30-09-2023.

3. Participated in One Week ATAL FDP on "Cyber Security" organized by Department of Computer Science and Engineering, St. Joseph's College of Engineering from 18-01-2021 to 22-01-2021.

4. Participated in One Week ATAL FDP on "Data Sciences" organized by Department of Computer Science and Engineering, Hindusthan College of Engineering and Technology, Coimbatore from 2-11-2020 to 6-11-2020.

5. Participated in One Week ATAL FDP on "Data Science" organized by Department of Computer Science and Engineering, Erode Sengunthar Engineering College from 07-09-2020 to 11-09-2020.

6. Participated in AICTE sponsored short term training programme on "BLOCKCHAIN FUNDAMENTALS" organized by the Department of Computer Science and Engineering, Saintgits College of Engineering, Kottayam, Kerala from 24-08-2020 to 29-08-2020.

7. Participated in STTP on "Industrial IoT and Industry 4.0 - SMART INDUSTRY AUTOMATION", organized by the Department of Electronics and Instrumentation Engineering, Kongu Engineering College from 11-08-2020 to 15-08-2020.

8. Participated AICTE sponsored online short term training programme on "Recent Trends in Artificial Intelligence and Soft Computing- II" organized by the Department of Information Technology from 03.08.2020 to 08.08.2020.

9. Participated One Week Amrita - Hebeon Online Webinar cum Workshop on "Data Science using Python" for faculty members using Microsoft Teams Platform Organized by Amrita College of Engineering and Technology, Nagercoil and Hebeon Technologies, Hyderabad from 17-06-2020 to 25-06-2020.

10. Participated in One Week FDP on "Block chain Security and smart Contracts" organized by Department of Information Technology and Computer Science and Engineering, AICTE MARGDARSHAN from 15-06-2020 to 20-06-2020.

11. Participated One Week FDP FDP on "Blockchain Security and Smart Contracts" organized by Departments of IT & CSE under AICTE MARGDARSHAN from 15-06-2020 to 20-06-2020.

12. Participated in One Week ATAL FDP on "Quantum Computing" organized by Department of Computer Science and Engineering, NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH, CHANDIGARH from 15-06-2020 to 19-06-2020.

13. Participated in One Week ATAL FDP on "Cyber Security" organized by Department of Computer Science and Engineering, National Institute of Technology, Nagaland from 01-06-2020 to 05-06-2020.

14. Participated in One Week FDP TEQIP PHASE- III, "Computing Paradigm for Emerging IoT Applications" at PSG College of Technology, Coimbatore from 04-11-2019 to 08-11-2019.

Events Organized (from recent)

Conference - Nil

FDP - Nil

Workshops and Seminars

Title	Date	Venue
MATLAB with Fuzzy Logic Toolbox	17 April 2010	Department of Computer Applications, Sri Ramakrishna Institute of Technology, Coimbatore.
LATEX-A Tool for Research Articles	12th August 2011	Department of Computer Applications, Sri Ramakrishna Institute of Technology, Coimbatore.
Android Mobile Applications	02 March 2012	Department of Computer Applications, Sri Ramakrishna Institute of Technology, Coimbatore.
Server Side Scripting using PHP	28 Feb 2013	Department of Computer Applications, Sri Ramakrishna Institute of Technology, Coimbatore
Machine Learning in Network Intelligence	16th & 17th February 2018	Department of Computer Science and Engineering, Jansons Institute of Technology, Coimbatore
Spectrum Handoff in Cognitive Radio Network using MATLAB	27/09/19	Department of IT, Sri Ramakrishna Institute of

		Technology
Reinforcement Learning using Python	04/02/20	Department of IT, Sri Ramakrishna Institute of Technology
Effective Programming in C++, Resource Person: Ms. R.Barani Priyanga, Tata Consultancy Service, Bangalore.	28-04-2021 (Online Mode)	Department of IT, Sri Ramakrishna Institute of Technology
Quality time in Quarantine with Recent Trends in IT Industry Ms.S.Priya Avadai, Citicorp, Chennai.	02-06-2020 (Online Mode)	Department of IT, Sri Ramakrishna Institute of Technology
Web 3.0 – The reality Resource Person: Mr. Patric Phinehas Raj Senior Software Engineer, Bosch Global Software Technologies, Bengaluru.	11-03-2023	Department of IT, Sri Ramakrishna Institute of Technology
Next Gen Tech Wave Resource Person: Mr. Patric Phinehas Raj Senior Software Engineer, Bosch Global Software Technologies, Bengaluru.	28-10-2023	Department of CSE, Sri Ramakrishna Institute of Technology
Cyber Security and its Future on Quantum Computing	02-11-2023	Department of CSE, Sri Ramakrishna Institute of Technology

Online Courses Completed

Sl. No.	Title	Platform
1	Cloud Computing	NPTEL
2	Software Engineering	NPTEL
3	HTML Fundamentals course	Solo Learn
4	SQL Fundamentals Course	Solo Learn
5	C Tutorial Course	Solo Learn

6	Introduction to Bash Shell Scripting	Coursera
7	Design a Client Welcome Kit using Canva	Coursera
8	Machine Learning course	Solo Learn
9	Predicting House Prices with Regression using TensorFlow	Coursera
10	Collaborate on Files in Slack: Local & Google Drive Integrations	Coursera
11	Agile Projects: Creating User Stories with Value in Taiga	Coursera
12	CRUD Operations using MongoDB NoSQL	Coursera
13	Reverse and complement nucleic acid sequences (DNA, RNA) using Python	Coursera
14	Performing Data Aggregation using SQL Aggregate Functions	Coursera
15	Retrieve Data using Single-Table SQL Queries	Coursera
16	Relational Modeling in Di	Coursera
17	Hierarchical Clustering: Customer Segmentation	Coursera
18	Introduction to Machine Learning	NPTEL
19	Introduction to Internet of Things	NPTEL

Awards and Recognitions Secured

1. Received Best Research Award from Science Father (NESIN 2021) on March 2021.
    Youtube link: https://youtu.be/5xdJSqWK7CY

2. Students participated for I2CreaTE 2021 titled "SMART FOG LAMP USING INTERNET OF THINGS" and received Bronze Award.
    - B.Deepakpriyan
    - R.H.Sam David Jude
    - C.Mehavarnan
    - S.Poonkawin
3. Students participated for INVID 2021 titled "AUTOMATIC LIGHT EMITTING DIODE FOG LAMP FOR HIGH EFFICIENCY VECHICULAR SYSTEM" and received Silver Award.
    - B.Deepakpriyan
    - R.H.Sam David Jude
    - C.Mehavarnan
    - S.Poonkawin
    - K. Eniyavan
    - S. Saran

Self-appraisal

Major Strengths

- Patient and Honest
- Dedicated
- Passionate
- Problem solver
- Positive attitude

Major Weakness

- Sensitive/emotional
- Insecure

Signature