

Bio-Data

Name of the Staff : **Dr. R.RAJAKUMARI**
Designation : **AssistantProfessor(Sr.Grade)**
Date of joining inthecollege : **12.05.2008**
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MobileNumber : **9487060063**
Personal Details
Age : **45 years**
Date ofBirth : **30.07.1977**
Sex &MaritalStatus : **Female &Married**
Citizenship : **Indian**
Educational Qualification



Educational Qualification	Branch	Name of the Institution/University	Year of Passing
B.Sc	Mathematics	Nesamony Memorial Christian College, Martandam/ M.S.University	April &1997
MCA	Computer Applications	M.S.University, Tirunelveli	April &2004
M.E	CSE	National Engineering College, Kovilpatti/ Anna University - Chennai	April & 2008
Ph.D	Information and Communication Engineering	Anna University, Chennai	July & 2022

Professional Experience (In chronological order)

Designation	Institution/Organization	Period	Nature of Duties
Senior Assistant Professor	National Engineering College	10-07-2013 to till date	Teaching subjects , Guiding & Counseling students (personal, studies & Research activities)
Assistant Professor	National Engineering College	01-11-2011 to 09-07-2013	Teaching subjects , Guiding & Counseling students (personal, studies & Research activities)
Lecturer	National Engineering College	12-05-2008 to 31-10-2011	Teaching subjects , Guiding & Counseling students (personal, studies & Research activities)

No. of years of Experience : **14 years 03months**

List of International Journals

S.No	Name of the Authors	Title of Paper	Name of Journal	Volume & Page No.	Year of publication	Impact Factor
1.	R.Rajakumari et.al.,	Image Recovery :Issues and Challenges	A.M.S.E	51 & Page 16-33	July 2008	
2.	R.Rajakumari et.al.	Image Reconstruction – A survey	UPA	II &Page 38-50	June 2009	
3.	R.Rajakumari et.al.	Image Recovery using APOCS	CIIT	I &Page 113-117	June 2009	
4.	R.Rajakumari et.al	Design of Water Supply System	Asian Journal of Applied Science and Technology (AJAST)	Volume 2, Issue 2, Pages 121-124,	April – June 2018	1.805
5.	R.Rajakumari et.al	Automatic Ticket Issuing System for Conductorless Buses	IJSTR	VOLUME 8, ISSUE 12 ISSN 2277-8616	DECEMBER 2019	
6.	R.Rajakumari et.al	Load Detection and Monitoring System	IJSTR	VOLUME 9, ISSUE 02	FEB2020	
7.	R.Rajakumari et.al	Abnormality Detection And Classification Using Artificial Neural Network	IJSTR	VOLUME 9, ISSUE 03, ISSN 2277-8616	MARCH 2020	
8.	R.Rajakumari et.al	Classification of Building Images using Fractal Features	IJRTE	ISSN: 2277-3878 (Online), Volume-9 Issue-5, Page No.:183-185.	January 2021	
9.	R.Rajakumari et.al	Fruit Quality Analysis using Image Processing	IJEAT	ISSN: 2249-8958 (Online), Volume-9 Issue-5, Page No. 88-91.	June 2020	
10	R. Rajakumari, L. Kalaivani	Breast Cancer Detection and Classification Using Deep CNN Techniques	Intelligent Automation & Soft Computing	Vol.32, No.2, 2022, pp.1089-1107,	Nov.2021	1.647
11	Mirra K, Rajakumari R	Fruit Quality Detection and Classification:A Survey	AIP Conference Proceedings	Vol.2444, No.1, pp.1-6	March 2022	
12.	Sushmitha Saro R; Jaya Suriya B; Rajakumari R	Comprehensive Speech Emotion Recognition System Employing Multi-Layer Perceptron (MLP) Classifier and libRosa Feature Extraction	IEEE Xplore	2023, pp. 1204-1211	2024	

13	Asha T, Soundaryaa S, Rajakumari R	Enhancing Patient Welfare using Natural Language Processing (NLP): A Paradigm Shift in Prescription Technology	IEEE Xplore	2023, pp. 1255-1261	2024	
14	Swetha K, Thaila Shree S, R. Rajakumari	Vehicle Accident Prevention System Using Artificial Intelligence	IEEE Xplore	2023, pp. 1137-1143	2024	
15	Asha T, Soundaryaa S, R.Rajakumari	Clean Campus - AI-Based Trash Throwing Detection System	IEEE Xplore	2023	2024	
16.	Mahalakshmi M, R.Rajakumari	Delving into Heart Disease Prediction: A Comprehensive Review	IEEE Xplore	2023	2024	

List of International Conference

S.No	Name of the Faculty	Title of Paper	Name of the Conference	Year of publication
1.	R.Rajakumari, et.al	Adaptive system to assist physically challenged from their tilts	ICTICT'13	2013
2.	R.Rajakumari, et.al	Change detection in remote sensing images using combined difference image and fuzzy c means algorithm	ICCTIDE'16	2016
3	R.Rajakumari, et.al	Design of Water Supply System	ICRACST'2018	2018
4	R.Rajakumari, et.al	Breast cancer Detection and classification on Digital Mammograms	ICASCT'18	2018
5	R.Rajakumari, et.al	Automation of fruit quality analysis system	ICASCT'18	2018
6.	R.Rajakumari, et.al	Detection and Classification of Breast cancer from Mammograms using Artificial Neural Network	ICBSII 2019	2019
7.	R.Rajakumari, et.al	Abnormal Detection in Mammograms using Neural Network		2019
8.	M.Balaji, M.Naveen, S.Alwin Nizanth, R.Rajakumari	Voice Controlled Web Forms	(ICEmTASS'21)	Dec 2021
9.	Sushmitha Saro R; Jaya Suriya B; Rajakumari R	Comprehensive Speech Emotion Recognition System Employing Multi-Layer Perceptron (MLP) Classifier and libRosa Feature Extraction	International Conference on Sustainable Communication Networks and	2023

			Application (ICSCNA)	
10.	Asha T, Soundaryaa S, Rajakumari R	Enhancing Patient Welfare using Natural Language Processing (NLP): A Paradigm Shift in Prescription Technology	ICSCNA	2023
11.	Swetha K, Thaila Shree S, Rajakumari R	Vehicle Accident Prevention System Using Artificial Intelligence	ICSCNA	2023
12.	Asha T, Soundaryaa S, R.Rajakumari	Clean Campus - AI-Based Trash Throwing Detection System	2 nd International Conference on Ambient Intelligence in Health Care (ICAIHC 2023)	2023
13.	Mahalakshmi M, R.Rajakumari	Delving into Heart Disease Prediction: A Comprehensive Review	2 nd International Conference on Ambient Intelligence in Health Care (ICAIHC 2023)	2023

12.

List of Book Chapters

Sl.No.	Title of Book Chapter	Name of the author/s	Name of Book	Year of publication
1.	Deep Learning Based Clinical Images and Electrocardiogram: A Survey	Dr.R.Rajakumari, Dr.J.Naskath,	Recent Trends in Multidisciplinary Subjects,	2022
2.	Outcome Based Education through E-learning Pedagogy: A Case Study	Dr.J.Naskath, Dr.R.Rajakumari, Dr.M.Syed Rabiya, Dr.A.Shali, Dr.Nithyanantham Sampathkumar	Hand book of Research on Innovative Frameworks and Inclusive Models for Online Learning	2023

List of National Conferences

S.No	Name of the Faculty	Title of Paper	Name of the Conference	Year of publication
1.	R.Rajakumari	Super Resolution based on Fast Registration and Point Spread Function Reconstruction	CIIT'09	March 2008
2.	Mirra K, Rajakumari R	Fruit Quality Detection and Classification:A Survey	AIP Conference	May 2021

Short term Courses/Seminar/Conference/Workshop Attended

S.No	Institution	Topic	Date
1.	NEC,Kovilpatti	Recent Trends in Real-Time Video Data Analysis and Processing	14 th &15 th Nov.2008

2.	Amrita School of Engineering, Coimbatore	Image Processing Techniques	5 th To 7 th Jan.2009
3.	MepcoSchlenkEngg.College, Sivakasi	Research issues in Digital Image Processing	21 st March, 2009
4.	PSG College of Technology, Coimbatore	Mathematical Methods in Image Processing	23 rd & 24 th Oct,2009
5.	NEC,Kovilpatti	Research issues and Challenges on Image Processing towards Remote Sensing	4 th & 5 th Dec,200 9
6.	MepcoSchlenk Engg.College, Sivakasi	Middleware Technologies	20 th Feb.2010
7.	NEC,Kovilpatti	Prospective Issues and Methodologies in Human Machine Interaction	17 th To 21 st May,201 0
8.	NEC,Kovilpatti	Recent Trends and Research Issues in Cyber and Data Security	20 th & 21 st Aug,2010
9.	NEC,Kovilpatti	New Fangled Network Architecture- Spawning Network	18 th & 19 th Feb,2011
10.	NEC,Kovilpatti	TGMC Advanced Workshop	19 th March 2011
11.	NEC,Kovilpatti	IBM-DB2 Work Shop	1 st To 3 rd Aug, 2011
12.	Anna University, Coimbatore , Regional Centre	Image and Video Processing	1 st & 2 nd March, 2013.
13.	NEC,Kovilpatti	Computational Complexity	27 th & 28 th Sep.2013
14.	Anna University Regional Centre, Tirunelveli	Two Week ISTE STTP on Introduction to Design of Algorithms	25 th – 30 th May. 2015
15.	NEC,Kovilpatti	NITTTR & MHRD sponsored QIP on Technology Enabled Teaching Learning Process	27 th to 29 th May 2017
16.	GIAN Course, IIT Indore	Advanced Pattern Recognition Techniques for Biometrics	5 th – 9 th March.2018
17.	SAVIC Technologies, Chennai	Industry Knowhow program	16 th -20 th July2018
18.	GIAN Course, Anna University, Chennai	Biomedical Imaging: Advanced FLIM- FRET Microscopy Techniques for Cancer Cellular Imaging	Dec.17 th to 22 nd , 2018
19.	NEC,Kovilpatti	Implementation of Soft Computing Techniques	24.01.2019 to 25.01.2019
20.	ICT, IIT Bombay	Scilab Workshop	04.05.2019
21.	E& ICT Academy, NIT Warangal	Machine Learning in Image and Computer Vision Applications	25.11.2019 to 30.11.2019
22.	SCSE - FET- JAIN (Deemed to- be University)	FDP on Are you IoT Ready? Join configuration of Smart Home using CISCO Packet Tracer	23 May 2020
23	Department of ECE,VISTAS in Association with Elektroniklab	FDP on Robotic Process Automation and its allied Machine Learning	23.05.2020

	India Pvt.Ltd	Techniques”	
24	MSME Technology Development Centre (Process & Product Development Centre) Agra	Industrial training on Internet of Things	25 th May 2020 to 27 th May 2020
25	Department of EIE, St.Joseph's College of Engg., Chennai	FDP on Understanding Data Analytics with Real-Life Cases	May 28-30, 2020
26	AICTE and Elsevier	Webinar on Research workflows, Research metrics & Excellence in Academic Institutes	14.05.2020
27	Vivekanandha College of Arts and Science for women	Webinar on How to Publish a Research Paper?	22.05.2020
28	FX Engineering College	Webinar on Identification of Internet Suspect Criminals using Forensic Field True Traveller Kit	27.05.2020
29	Department of ECE Sathyabama Institute of Science and Technology	Webinar on Covid-19 Financial Planning for Working Professionals Do's & Dont's	28.05.2020
30	FX Engineering College	Webinar on An insight into research and high impact publications	30.05.2020
31	Department of Electronics and Communication Engineering, Vels Institute of Science Technology and Advanced Studies	Artificial Intelligence in Neurology	05.06.2020
32	Bless Oh Bliss	Webinar on Bounce Back: Strategies for Effective Stress and Time Management	10.06.2020
33	UiPath Academic Alliance	RPA Design and Development v2.0 - Educator Readiness program	18 th Nov 2020 to 27 th Nov 2020
34	Department of Computer Science and Engineering, Rajalakshmi Engineering College, sponsored by AICTE	STTP on Robotic Process Automation Tools & Techniques	07.12.2020 to 12.12.2020
35	Department of Computer Science and Engineering, NIT Warangal	FDP on, “ Python for Artificial Intelligence and Machine Learning”	06.09.2021 to 10.09.2021
36	Industry KnowHow	VVDN Technologies Pvt.Ltd., Pollachi, “Linux and C Programming”	28.04.2022 & 29.04.2022
37.	School of CSE, VIT, Chennai	STTP on Fundamentals of Quantum Computing and Quantum Machine Learning	4.12.2023 to 8.12.2023
38.	Department of Computer Science and Engineering, AURC, Tirunelveli	FDTP on Foundations of Data Science	21.08.2023 to 26.08.2023
39.	Industry KnowHow- AICTE, ATAL, EduNet	Building Advanced Data Analytics Applications with Cloud	11.12.2023 to 15.12.2023

Short term Courses/Conference/Workshops/Seminars Organized

S.No	Title	Duration of the workshop	Number of Participants	Venue
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1.	Free Computer Training Programme for +2 Students	23-05-2011 To 27-05-2011	23	NEC, Kovilpatti
2.	Industry – Institution Interaction for Curriculum Development	15.02.2014	15	NEC, Kovilpatti
3.	Mobile and Pervasive Computing	07.08.2014	56	NEC, Kovilpatti
4.	Software Testing Techniques	22.12.2014 & 23.12.2014	120	NEC, Kovilpatti
5.	Value Added Course on C++	2014-15 (Even Sem)	48	NEC, Kovilpatti
6.	DST Sponsored National Level Workshop on “Advancements in Visual Sensor Network and its impact on Public Safety and Security”	08.01.2015 & 09.01.2015	40	NEC, Kovilpatti
7.	Workshop on Linux	11.12.2015 TO 13.12.2015	50	NEC, Kovilpatti
8.	Value Added course on “Programming with Microprocessors”	2015-16 (Even Sem)	12	NEC, Kovilpatti
9.	Anna University, Chennai Approved FDTP on “CS8451- Design and Analysis of Algorithms”.	26.11.2018 to 08.12.2018	14	NEC, Kovilpatti
10.	Anna University, Chennai Approved FDTP on “CS8602- Compiler Design”.	16.12.2019 to 21.12.2019	15	NEC, Kovilpatti
11.	Workshop on “ Automation Anywhere”	12.03.2022	30	NEC, Kovilpatti
12.	Value Added Course on, “Linux and C Programming”	2021-22(Even sem)	56	NEC, Kovilpatti
13.	Anna University, Chennai Sponsored FDTP on “CS3501- Compiler Design”.	31.07.2023 to 05.08.2023	41	NEC, Kovilpatti

Specific Achievement if any

S.No	Title	Grade
1.	NPTEL Course on ‘Theory of Computation’	Elite
2.	Coursera course on “Tools for Data Science”(IBM)	Badge (IBM)
3.	NPTEL Course on ‘Design Thinking	

- Acted as Session Co Chair for the IEEE International Conference on “Emerging Technologies and Applications for a Smart and Sustainable World (ICEmTASS’21), organized by National Engineering College.
- Acted as Reviewer for International journals and conferences
- Developed a Web Application, “ Student Feedback System”
- Received Research incentive Rs.8000/- for 2021-22 from National Engineering College
- Received Research incentive Rs.16000/- for 2023-24 from National Engineering College
- Developed an application software, “ Course Registration System”.

Courses Completed

- Completed the coursera course on “Python Data Structures”
- Completed the coursera course “Introduction to Data Science in Python”
- Completed the coursera course on “C++ For C Programmers, Part A”
- Completed the coursera course on “Programming for Everybody (Getting Started with Python)”
- Certified “Step into Robotic Process Automation” during GUVI’s RPA Skill- A-Thon 2020 conducted by UIPATH.
- Certified “Fundamentals of 3D Visualization”, “Basic 3D Modeling using Blender”, “Basic 3D Animation using Blender” from IITBombayX
- Certified the UiPath Diploma of Completion, “Get Started with UiPath Robots”.
- Certified the UiPath Diploma of Completion, “RPA Testing”
- Certified the UiPath Diploma of Completion, “RPA Design and Development V2.0”
- Certified the UiPath Diploma of Completion, “AI Computer Vision”.
- Certified the UiPath Diploma of Completion, “UiPath Document Understanding Overview”
- Certified the coursera course on “ Tools for Data Science”.
- Completed the coursera course on “Data Science Methodology”

Expert Lecture Delivered

S.No	Title	Venue	Date
1.	Delivered a lecture titled “ Human Machine Interaction ”, for the Anna University Sponsored Faculty Development programme on “Mobile and Pervasive Computing”	NEC, Kovilpatti	17.06.2014
2.	Theory of Computation- Unsolvable Problems and Computable Functions	Government College of Engineering, Tirunelveli	07.10.2016
3.	Delivered a lecture titled “Turing Machine”, for the Anna University Sponsored Faculty Development programme on “ Theory of Computation ”	NEC, Kovilpatti	05.06.2017
4.	Delivered lectures in the Anna University Approved Faculty Development programme on “ CS8451- Design and Analysis of Algorithms ”. The topics are 1. Floyd’s algorithm 2. Multi stage graph 3. Backtracking – n-Queen problem	NEC, Kovilpatti	30.11.2018 & 05.12.2018
5.	Delivered Expert lectures in the faculty development programme on “ Introduction to Machine Learning Techniques ”.	Ponjesly College of Engineering, Nagercoil	26.04.2019
6.	Delivered lectures in the Anna University Sponsored Faculty Development Training programme on “ Theory of Computation ”.	Anna University Regional Centre, Tirunelveli	30.04.2019
7.	Delivered lectures in the Anna University Sponsored Faculty Development Training programme on “ CS8602- Compiler Design ”.	NEC, Kovilpatti	Dec. 2019

8.	Delivered lectures in the workshop organized by IEEE Student Chapter on “ Introduction to Matlab ”.	NEC, Kovilpatti	
9.	Delivered lectures in the Anna University Sponsored Faculty Development Training programme on “ CS3501- Compiler Design ”.	NEC, Kovilpatti	03.08.2023

Courses Taught

Sl.No.	Name of the course	UG/PG
1.	Microprocessors and Microcontrollers	UG & PG
2.	Advanced Computer Architecture	PG
3.	Digital Image Processing	PG
4.	Advanced System Software	PG
5.	Data Structures and Algorithms	PG
6.	Advanced Algorithms	PG
7.	Advanced Datastructures	PG
8.	Software Project Management	PG
9.	Mathematical Foundations for Computer Professionals	PG
10.	Computer Graphics and Visualization	UG
11.	Theory of Computation	UG
12.	Design and Analysis of Algorithms	UG
13.	Principles of Compiler Design	UG
14.	Problem Solving Techniques	UG
15.	System Software	UG
16.	Software Testing	UG
17.	Microcontroller and Embedded Systems	UG
18.	Object Oriented Analysis and Design	UG
19.	Fundamentals of Machine Learning	UG
20.	Professional Ethics for Human Values	UG
21.	Machine Learning	UG

Membership in Professional bodies

Name of Society	Grade of Membership
ISTE	LIFE MEMBER