

## CURRICULUM-VITAE

**Dr. S. RAJESWARI**, M.Sc., B. Ed, MCA, M.Phil, SET, Ph.D.,

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**Google Scholar ID:** <https://scholar.google.com/citations?user=YZ9sL3UAAAJ&hl=e>,

**Research Gate ID:** <https://www.researchgate.net/profile/S-Rajeswari-2>

**SCOPUS ID:** Rajeswari stc / **Vidwan ID:** 399220- profile score 7.9 **Mendeley ID:** Rajeswari stc

**Google Scholar Citations:** 9 **H-index:** 2

**Scopus Index:** 1



### PROFILE SUMMARY

- An enthusiastic academician having two decades of teaching experience.
- 6 years post-Ph.D., experience as an Associate Professor in MCA.
- Received UGC fund of Rs 2,50,000 for the project entitled “Jamming attacks prevention in mobile ad hoc networks for military & commercial Applications” in the year 2013-2015.
- Supervised and guided a PhD scholar to successful completion in Big data and machine learning for covid-19 severity prediction and long covid complication analysis: A computational approach.
- Guiding two phd research scholars in Sree Saraswathi Thyagaraja College (Autonomous), Pollachi
- Acted as an organizing member in the “National Conference on Challenges in computational research and applications (NCCCRA-2017) at Sree Saraswathi Thyagaraja college, Pollachi.
- Organized and attended the Workshop on “Fundamentals of Data Analysis, Analytics”, with the professional support of IEEE Computer Society (Madras Chapter) Computer Society of India (Coimbatore Chapter), PSG iTECH and Sree Saraswathi Thyagaraja College Pollachi on 12<sup>th</sup> & 13<sup>th</sup> Feb 2016 at PSG iTECH, Coimbatore.
- Editor for the proceeding of “National Conference on Challenges in Computational Research and Applications” on 11<sup>th</sup> January, 2017 at Sree Saraswathi Thyagaraja College, Pollachi.
- Completed Diploma Course on Cloud Security Fundamentals and appointed as Palo Alto Networks Authorized Cybersecurity Academy Instructor.
- Having five years of experience as NAAC & ISO coordinator at department level.
- 15 Publications in journals which includes UGC Referred journals, Scopus and conferences of reputed avenues
- Published a book chapter by BMS International Publishing, free Scopus publications in 2023.
- Recognized supervisor by Sree Saraswathi Thyagaraja College (Autonomous), Pollachi, Bharathiar University, Tamilnadu.
- Doctoral Committee HoD Member in Sree Saraswathi Thyagaraja College (Autonomous), Pollachi, Under Bharathiar University, Tamilnadu.
- Board of Studies (BoS) Subject Expert Member Arulmigu Palaniandavar Arts and College for Women (Autonomous) Palani, Tamil Nadu
- Reviewer board member for International Conferences affiliated with leading avenues.
- Session chair for a National Conference on Advanced Computing and Recent Trends (NCACRT22) on 17 December 2022, at Sree Saraswathi Thyagaraja College Pollachi

- Member in CSI&IAAC.
- Participated in UGC Approved Professional Development Programme (PDP) entitled "Implementation of NEP 2020 for University and College Teachers" held from October 27 to November 05, 2022 and obtained 'A+' Grade.
- Completed an online course named "Cloud Computing and Distributed System" offered by SWAYAM /NPTEL in 2023.
- Completed an online course named "Joy of Computing Using Python" offered by SWAYAM /NPTEL in 2023.

#### ACADEMIC PROFILE

Degree	Specialization/Subjects	Name of the Institute/ University	Year of Passing	Percentage & Class Obtained
SLET	Computer Science	Mother Teresa Women's University	2016	NA
Ph.D.,	Computer Science	Bharathiar University	24.08.2018	NA
M.C.A.,	Computer Applications	Tamil Nadu Open University	2007	70 % Firsts Class
M.Phil	Computer Science	Mother Teresa Women's University	2002	Second Class
M.Sc.,	Computer Science	Madurai Kamaraj University	1998	63 % Firsts Class
B.Sc.,	Computer Science	M.V.Muthaiya Pillai College, Madurai Kamaraj University	1996	57 % Second Class
HSC	Physics, Chemistry, Biology	NSVV G HSS, Pattiveeranpatti	1992	67% First Class
SSLC	Maths, Science, History & Geography	NSVV G HSS, Pattiveeranpatti	1990	72% First Class

#### EXPERIENCE PROFILE (21 Years of Experience in teaching)

Designation	Name of the employer	Period		Duration (Years)
		From	To	
Asso.Prof	Sree Saraswathi Thyagaraja Collège, Pollachi	September 2006	Till Date	17
Lecturer	Sri G.V.G Visalakshi College, Udumalpet,	August 2005	August 2006	1
Guest Lecturer	Government Arts College, Udumalpet	July 2004	April 2005	0.10
Lecturer	Pannaikadu Veerammal Paramasivam Arts & Science College, Vatlagundu	July 2001	June 2002	1
Lecturer	V.P.M. Meenakshi Ammal Arts & Science College Krishnan kovil	July 1999	April 2001	1.9

#### RESEARCH INTERESTS

• Artificial Intelligence	• Cloud Computing
• MANET	• Data Mining and Warehousing

### DETAILS OF THESIS

- Ph.D.,(Computer Science):“**DESIGN AND DEVELOPMENT OF PARTICLE SWARM INTELLIGENCE FRAMEWORK BASED ON PROBABILISTIC BROADCASTING FOR ROUTE OPTIMIZATION IN MANET**”

### SUBJECTS HANDLED

• Artificial intelligence	• Python programming
• Cloud Computing	• Data Warehousing and Data Mining
• Software Engineering	• PHP and MYSQL
• DataBase Management Systems	• Data Structures
• Software Project Management	• Information Security
• Object Oriented Analysis and Design	• Computer Graphics
• Distributed Computing	• Electronic Commerce

### MEMBERSHIP IN ACADEMIC BODIES

• Member of CSI
• Member of Advisory Committee at Sree Saraswathi Thyagaraja College, Pollachi, Tamil Nadu
• BoS Subject Expert Member Arulmigu Palaniandavar Arts and College for Women (Autonomous) Palani
• Doctoral Committee Member- Bharathiar University
• Examiner in Bharathiar University, Coimbatore
• Question setter for various Autonomous Colleges
• Member of Examination Section -Sree Saraswathi Thyagaraja College (Autonomous)

### SUPERVISOR RECOGNITION

Bharathiar University, Coimbatore

### INNOVATIVE PRACTICES

- **Placement training conducted:** Seminar in recent trends, Group discussion, technical training, Aptitude test, etc. for the students
- Motivate the students to do more real time projects and case studies.
- Encourage the students to participate in various activities like National level Conferences, inter collegiate techno meet, project contest, Personality Development Programmes, etc.

### CERTIFICATIONS

• Completed Diploma Course on Cloud Security Fundamentals and appointed as Palo Alto Networks Authorized Cybersecurity Academy Instructor .
• Python Programming by Infosys Springboard
• Hadoop by Great Learning
• Data Science Foundations by Great Learning
• Cloud Models & Architecture by Charles Sturt University
• Learning Python by LinkedIn Learning
• Learn PHP and MySQL Development by building projects by Eduonix
• Cloud Computing and Distributed Systems by NPTEL
• Detecting and Defending against Cyber Threats by Charles Sturt University

PUBLICATIONSSUMMARY		
<b>Journals:15</b>	UGC: 4	ScopusIndexed: 3
<b>Conferences</b>	InternationalConference:6	NationalConference:5
<b>Bookchapterin editedvolume</b>	1	

## i. BOOKCHAPTER

Dr.S. Rajeswari, Hari Priya N and R. Gunavathi, “The Role of AI, IOT and Blockchain in Mitigating the Impact of Covid-19”, **“CASE STUDY: IMPACT OF INDUSTRY 4.0 AND ITS IMPACT ON FIGHTING COVID-19”**,Bentham Science Publishers Pte. Ltd., Singapore, pp. 160 – 187, 2023 (Scopus Indexed)

## ii. INTERNATIONALJOURNALS:

1. “Initializing K Means using Fast Genetic Algorithm”, International Journal of Computational Intelligence Research India Publications, India December 2010- Volume 60973-1873.
2. “FuzzyPossibilisticC-MeansClusteringAlgorithmforContentbasedImageRetrieval(CBIR)”, CiiT International Journal, Issue : September 2011 .
3. “AnAnalysisonAdvancedImplementingEnergyConsumptionforNext GenerationWSNs”, International Journal of Computer Science and Management Research, *Volume 1, Issue3,September 2012*(ISSN 2278-733X).
4. “An Investigation on Energy Efficient Routing Protocols for Manet In Various MobilityModels”, International Journal for Research in Science Engineering & Technology", ISSN 2394-739X APRIL 2016 Volume 3, Issue 4 Pages: 39-46.
5. “Data Miningin Agriculture A Survey”, International Journal of Modern Computer Science *Volume 4, Issue 4,August2016*(ISSN 2320-7868).
6. “Fungal Plant disease grading and Identification", International Journalfor scientific research& development. *Volume 4, Issue 9, November2016*(ISSN 2321-0613).
7. “Paddy leaf disease detection classification and remedy finder using K means clustering andimagemining”, InternationaljournalofinnovativeresearchincomputerandcommunicationEngineering, Volume 4, issue12, December2016.
8. “MathematicalRouteOptimizationBasedProbabilisticBroadcastforReducingEnergyEfficient and Routing Overhead in Manet,” Global Journal of Pure and Applied Mathematics”.ISSN 0973-1768 Volume 13, Number 9 (2017), pp. 6289-6302.
9. “An Investigation on energy efficientrouting protocols for MANETin various mobilitymodels”InternationalJournalofResearchinScienceEngineeringandTechnology”, Volume3. Issue4, April 2016.
10. “Performance Analysis of Particle Swarm Optimization Based Routing In Mobile Ad HocNetworks Using Probabilistic Broadcast,” International Journal of Advanced Computer Scienceand TechnologyVolume20.Issue no 9,2017.
11. “An efficient compression and Encryption based on data security for cloud computing usingLZ4 Algorithm” International Journal for research in engineering application and management,volume04, issue 07, October2018. (UGC Indexed Journal).
12. “A Secure and Efficient Scheme for Data Synchronization for Cloud Storage UsingConvergentAlgorithm”, InternationalJournalofScientificResearchandReview,ISSNNO: 2279-543X, Volume 7, Issue 11, 2018Page No: 526-538.(UGC Indexed Journal).
13. “Prediction of Air Quality Index using Time Series Forecasting with Improved LightGBM”

14. "A Systematic Literature Review on Big Data Analytics in Healthcare During Covid-19Pandemic" Design Engineering ISSN: 0011-9342 | Year 2021 Issue: 9 | Pages: 3114-3125(Scopus Index)
15. "Prediction of COVID-19 using Machine Learning Models based on Clinical Blood Test Data", International Research Journal on Advanced Science Hub (IRJASH), ISSN No: 2582-4376, Vol. 05, Issue 05S, May 2023.
16. "Optimal Prediction of Air Quality Index in Metropolitan Cities Using Fuzzy Time Series with Deep Learning Approach", Ecological Engineering & Environmental Technology, ISSN 2719-7050, 2023 [Scopus]
17. "Predicting Air Quality Index using Hybrid Deep Learning Models", Journal of the Maharaja Sayajirao University of Baroda ISSN : 0025-0422, [UGC -CARE]
18. "Big Data Analytics Framework For Covid-19 Severity Prediction Using Machine Learning",Journal of Non-linear Analysis and Optimization: Theory and Applications, ISSN: 1906-9685, Vol.14, Issue: 2(1), 2023. [UGC-CARE]
19. "Symptom-Based Prediction of COVID-19 using Machine Learning Models with SMOTE for Class Imbalance", International Research Journal of Engineering and Technology (IRJET), ISSN: 2395-0056, Volume: 10, Issue: 09, Sep 2023.[Scopus]
20. "Forecasting Daily Air Quality Index and Early Warning System for Estimating Ambient Air Pollution on Road Networks Using Gaussian Dispersion Model with Deep Learning Algorithm.,Journal-TEHNIČKI GLASNIK 18, 4(2024), 549-559ISSN 1846-6168 (Print), ISSN 1848-5588 (Online) Original scientific paper  
<https://doi.org/10.31803/tg-20231016114033> Received: 2023-10-16, Accepted: 2023-11-17  
 Doi link:<https://doi.org/10.31803/tg-20231016114033>

### iii. **INTERNATIONALCONFERENCE:**

1. Presented a paper entitled "Image segmentation using HMGM for noisy images" intheInternationalConferenceatMuthaiammalcollegeofEngineeringRasipuramin29/02/2008.
2. ParticipatedintheInternationalConferenceatSriRamakrishnaEngineeringCollege,Coimbatore and presented a paper entitled "Impact of RPGM model on the"Performanceof on-demand protocols in MANET based on Pause time and Networkload".
3. Presentedapaperentitled "An Effective Machine Learning Approach for the Prediction of Air Quality Index in Metropolitan Cities" International Conference on Innovative Techniques in Contemporary Techniques 2023, at Sree Saraswathi Thyagaraja College Pollachi.
4. Presentedapaperentitled "COVID-19 Prediction Using Machine Learning Approach Based on Symptom" in the International Conference on Innovative Techniques in Contemporary Techniques 2023, at Sree Saraswathi Thyagaraja College Pollachi.
5. Presentedapaperentitled "Prediction of Covid-19 Using Machine Learning Models Based on Clinical Blood Test Data" in the International Conference on intelligent COMPUTing TEchnologies and Research (i-COMPUTER 2023) held on 24 -25 March 2023, Department of Computer Science and Engineering, NIT Puducherry, Karaikal.
6. Presentedapaperentitled "Cuckoo Search Based SVM Framework for Hybrid Feature Selection in COVID-19 Severity Prediction in the "International Conference on Advancement in Science, Engineering and Technology (ICASET), 2023 jointly organised by Vidya Vihar Institute of

**iv. NATIONAL CONFERENCE:**

1. Presented a paper entitled “Business Intelligence Systems for Data Driven Decision Making by Start-Up Firms” in a National Conference on Advanced Computing and Recent Trends (NCACRT2022) at Sree Saraswathi Thyagaraja college Pollachi in December 2022.
2. Acted as an organizing member in the “National conference on Challenges in computational Research and applications (NCCCRA-2017) at Sree Saraswathi Thyagaraja college Pollachi.
3. Participated in the UGC Sponsored one day National Conference on Advanced networking and Applications (NCANA - 15) at Government Arts College, Udumalpet.
4. Presented a paper entitled ‘Hardware Virtualization’ in the National Conference at STC in February 2010.
5. Presented a paper entitled “Jamming attack in wireless networks detection and prevention in the national conference at Vidyasakar College of Arts and Science in 20<sup>th</sup> February.

**v. FDP / WORKSHOPS / SEMINAR ATTENDED:**

1. Attended two weeks AICTE Sponsored Staff Development on “Advanced Computing and Communication Technologies for High Performance Application” from 9<sup>th</sup> to 23<sup>rd</sup> November 2009 at Sree Saraswathi Thyagaraja College, Pollachi.
2. Attended one day International Seminar on “Challenges and opportunities in Computing research” at Sree Saraswathi Thyagaraja College, Pollachi, on 05<sup>th</sup> Aug. ‘14.
3. Attended One week Faculty Development program on “Data Analytics and Virtualization using Tableau” from 14/11/2022 to 18/11/2022. at Sri G.V.G College for women’s Udumalpet.
4. Attended one day webinar on “NEP: Internationalization of Higher Education - Challenges and Opportunities” on 09/11/2022 Association of Indian Management Schools (AIMS).
5. Participated in 30 days Online Training Programme on “Introduction to Industry 4.0” conducted by Digital Career and Entrepreneurship Hub of Department of Computer Application, MHRD BU RUSA Phase II BEICH, Bharathiar University during 23<sup>rd</sup> December 2020 to 10<sup>th</sup> February 2021.
6. Participated in Workshop on “Data Pre-Processing in Machine Learning – A Research Perspective” organised by IQAC and PG & Research Department of Computer Science at Shri Shankarlal Sundarbai Jain College for Women on 25<sup>th</sup> June 2021.
7. Participated in two Days Online Faculty Development Programme on “Sensitization on Intellectual Property Rights” organised by IQAC Cell at Chevalier T. Thomas Elizabeth College for Women, Chennai on June 10 & 11, 2020.
8. Participated in 9 hours Faculty Development Program on Microsoft Azure AI Engineer Associate conducted by ICT Academy from June 20 to June 22, 2022.
9. Participated in Faculty Development Program on “Webinar Series on Research Perspectives: Transition from Industry 4.0 to 5.0” organised by Bharathiar University from 15<sup>th</sup> to 20<sup>th</sup> June 2020.

10. Participated in Faculty Development Program on “Advanced Computing Technologies” organised by NGM College, Pollachi on July 2022.
11. Participated in Faculty Development Program on “Palo Alto Cloud Security Fundamentals” conducted by ICT Academy on 20 Nov 2023 to 24 Nov 2023 at Sree Saraswathi Thyagaraja College

**vi. WORKSHOPS / SEMINAR ORGANIZED:**

1. Acted as a Chair person in the “National Conference on Advanced Computing and Recent Trends (NCACRT22)” on 17 December 2022 at Sree Saraswathi Thyagaraja College Pollachi.
2. Acted as a Reviewer of International Conference on Innovative Techniques in Contemporary Techniques at Sree Saraswathi Thyagaraja College Pollachi on 2023.

PERSONAL PROFILE	
Date of Birth and Age	10.04.1975 and 49 Years
Marital Status	Married

**DECLARATION**

I, Dr. S. RAJESWARI, hereby declare that the information provided is true and correct to the best of my knowledge and belief.

Signature of the Applicant

**Dr. S. Rajeswari**