Dr. R.Jayamala Assistant Professor(Sr.Gr.) Department of Computer Science& Engineering University College of Engineering - BIT Campus Anna University, Tiruchirappalli

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> Research Area:

Cloud Computing, Data Mining, Soft Computing

> Educational Qualifications:

Qualification	Department	Year (From -To)
Ph.D	ICE	APR. 2023
M.E.	COMPUTER SIENCE AND ENGINEERING	JUN. 2008
B.E.	COMPUTER SIENCE AND ENGINEERING	APR. 2006
HSC / PUC	BIOLOGY, MATHEMATICS	MAR. 2002
SSLC	MATRICULATION	MAR. 2000

> Experience:

- Assistant Professor (Sr.Gr.) in Department of Computer Science & Engg, Anna
 University, BIT Campus, Trichy Since to 2014 to till date.
- o Assistant Professor in Department of Computer Science & Engg, Anna University, BIT Campus, Trichy Since to 2011 to 2014.
- Lecturer in Department of Computer Science & Engg, Anna University, BIT Campus, Trichy Since to 2008 to 2011.

 Lecturer in Department of Computer Science & Engineering in KarpagaVinayaga College of Engineering and Technology, Madhuranthagam, June 2008 to August 2008

> Additional / Academic Responsibilities at University:

- 1. Department of Placement Coordinator
- 2. Department Library In-charge
- 3. Class Coordinator (2009-2013, 2014-2018)
- 4. Tancet Certification Verification officer (2014)
- 5. National Career Service Coordinator(2019 to till Date)
- 6. First Year Induction Coordinator (2019)
- 7. Department Internal Test Consultation Coordinator (2019)
- 8. Department Internal Test Coordinator (2020-2021)
- 9. First Year Induction Coordinator (2022)
- 10. Department Purchasing and Maintenance -Member(2022)
- 11. Class Coordinator(2021-2025)
- 12. First Year Induction Coordinator (2023)
- 13. Time Table Coordinator(Aug 2023)

> Professional Activities:

- o Life Member of Computer Society of India(00173466)
- o Life Member of Operational Research(1226/J/16/ML)
- o Life Member of Indian Society of Technical Education (LM113065)
- o Life Member of International Association of Engineers (IAENG) (350644)

> DC Member:

o Doctoral Committee Member for Vellore Institute of Technology(VIT), Vellore

> Certificate for Appreciation

- 1. Produced 100% Result in CP4291 Internet of Things during Academic Year 2020-2021.
- 2. Produced 100% Result in CS8078-Green Computing during Academic Year 2021-2022.
- 3. Produced 100% Result in CS8078-Green Computing during Academic Year 2022-2023.

Key note Speaker/Judge

1. Judge for "National Level Technical Symposium FENIX 2K24" 19th March, 2024

- 2. Judge for Two days "National Level Technical Symposium FENIX 2K18" 1st and 2nd March, 2018
- 3. Key note Speaker for Two days Hands-on workshop on Machine Learning using Python", on 04.03.2020 and 05.03.2020 in Department of CSE, BIT Campus, Anna University, Tiruchirappalli- 620 024
- 4. Mentor for COVID -19 National Bio informatics Online Hackathon from 29 April 2020 to 03 August 2020
- 5. Speaker for First Year Induction Programme titled "Preparation for Placement and Higher Studies" on 12.09.23 in Department of CSE, BIT Campus, Anna University, Tiruchirappalli- 620 024
- 6. Judge for Two days "National Level Technical Symposium FENIX 2K24"

> Reviewer to Journal

- 1. Journal of Supercomputing(Springer)
- 2. Journal of Intelligent and Fuzzy Systems(IOS Press)
- 3. Technical Committee Member in International Arab Journal of Information Technology(IAJIT)
- 4. Asian Journal of Research in Computer Science
- 5. Reviewer for Book Chapter Contemporary Perspective on Science, Technology and Research
- 6. Reviewer for Book Chapter Theory and Applications of Engineering Research
- 7. Current Journal of Applied Science and Technology

> Reviewer for the following Conferences

- 1. Reviewer for "the 4th International Conference on Machine Learning and Intelligent Systems (MLIS 2022)" November 8th 11th, 2022, Seoul, Republic of Korea. (June 2022)
- 2. Reviewer for the "International Conference on Electrical, Computer and Energy Technologies (ICECET2022)" 20-22 July 2022, Prague, Czech Republic.(June 2022)
- 3. Reviewer for the "3rd International Conference on Artificial Intelligence, Information Processing and Cloud Computing (AIIPCC2022 conference)", June 21-23, 2022, Kunming, China.
- 4. Reviewer in Microsoft CMT International Conference on Electrical, Computer, Communications and Mechatronics Engineering, Spain 2023
- 5. Reviewer to Microsoft CMT International Conference on Computing, Circuits, Energy and Materials, 2022 Nagercoil, Tamil Nadu
- 6. Reviewer in Easychair 7th International Conference on Computer, Communication and Signal Processing (ICCCSP 2023) , SSN College, Tamilnadu, January 4 6 , 2023
- 7. Reviewer in The 8th International Conference on Fuzzy Systems and Data Mining (FSDM 2022) to be held in Xiamen, China during 4-7 November 2022.

- 8. Reviewer of 2022 International Conference on Digitalization and Management Innovation (DMI 2022) to be held in Beijing, China/ Online via MS Teams during 25-26 November 2022.
- 9. Reviewer for "The 3rd International Conference on Electrical, Computer, Communications and Mechatronics Engineering" (ICECCME'23) which will be held in the Canary Islands, Tenerife, Spain between 19-20 July 2023
- 10. Reviewer for "Asian Journal of Research in Computer Science", 2023 (Certificate No: SDI/HO/PR/Cert/110049/DRR)
- 11. Reviewer for the Book Chapter B P International "Contemporary Perspective on Science, Technology and Research" (Certificate No: BPI/PR/Cert/_2769G/DRR)
- 12. Reviewer for "The 4th International Conference on Electrical, Computer and Energy Technology" (ICECET 2024) which will be held in Sydney, Australia on 25-27 July 2024
- 13. Reviewer for "International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2024)"04-06 November 2024

> CONFERENCES/WORKSHOPS/SEMINAR ORGANISED

- 1. Conducted National Level Symposium "PRAYUDDHA'13", on 13.04.2013 organized by Department of Information Technology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli-620 024
- 2. Conducted One week TEQIP II Sponsored Faculty Development Programme on "Paradigms of Computing", Organized by Department of Computer Science and Engineering on 02.12.2013 to 08.12.2013 at Anna University, Bharathidasan Institute of Technology, Tiruchirappalli-620 024
- 3. Conducted Two days workshop on "_ Python Language with Case Study-WPL'15", on 08.08.2015 and 09.08.2015 in Department of IT/CSE, BIT Campus, Anna University, Tiruchirappalli- 620 024
- 4. Conducted National Level Symposium "PRAYUDDHA'18", on 09.03.2018 and 10.03.2018 organized by Department of Information Technology, Bharathidasan Institute of Technology, Anna University, Tiruchirappalli-620 024
- 5. Conducted "Two days Hands-on workshop on Machine Learning using Python", on 04.03.2020 and 05.03.2020 in Department of CSE, BIT Campus, Anna University, Tiruchirappalli- 620 024
- 6. Mrs.R.Jayamala and Mrs.V.M. Priyadharshini, conducted Two weeks online certificate programme through online mode on "Data Science for All", organized by Indian Institute of Information Technology, Design and Manufacturing, Jabalpur in association with University College of Engineering, BIT Campus, Anna University, Tiruchirappalli under an Initiative and Sponsored by Ministry of Electronics and

- Information Technology (MEITY), Government of India from 12/04/2021 to 23/04/2021.
- 7. Dr.R.Jayamala, Dr. C. Gomathi, Dr. C.P. Indumathi, Ms. N. Viveka Priya, Conducted One day Workshop on "Computer Evolution and IOT", on 10.09.2022, by Dept of CSE & Dept. of Auto, University College of Engineering, BIT Campus, Anna University, Trichy.
- 8. Dr. R. Jayamala, Conducted One day Workshop on "Career Guidance for Placement and Higher Studies" on 18.03.2023 in Dept. of CSE, University College of Engineering, BIT Campus, Anna University, Trichy.
- 9. Dr. R. Jayamala, Conducted One day Workshop on "Empowering Sophomore Students: A Campaign to Raise Awareness on Career Guidance and Placement Opportunities" on 06.05.2023 in Dept. of CSE, University College of Engineering, BIT Campus, Anna University, Trichy.

List of Seminar / Short Term Course /FDP/ Workshop attended: (Within India)

- 1. FDP programme on "Programming with Distributed Middleware's" on 31-05-2010 to 13-06-2010 conducted by Department of Information Technology in Misrimal Navajee Munoth Jain Engineering College Chennai-600097 Sponsored by AICTE.
- 2. Workshop On "Cloud Computing" from 27-08-2011 to 27-08-2011 Conducted by Computer Society of India, Education Directorate, Chennai 600113
- 3. Workshop on "Soft Computing Techniques: Data Mining Perspective" 20-10-2012 to 20-10-2012 organized by Department of Computer Science conducted by University College Of Engineering, Bit Campus, Tiruchirappalli- 62024
- 4. Workshop On "Cloud Computing and its Research Directions" 22-11-2012 to 23-11-2012 Organized by Department Of Information Technology in Sathyabama University, Chennai
- 5. FPD on "Advances in Service Oriented Architecture and Web Services issues and Challenges", from 03-12-2012 to 07-12-2012 sponsored by TEQIP organized by Department Of Computer Science in Pondicherry Engineering College, Puducherry-605014
- 6. Workshop on "Web Services" 03-01-2013 to 04-01-2013 organized by Department Of Computer Applications sponsored by CSIR in University College Of Engineering, BIT Campus, Tiruchirappalli-620024
- 7. National Seminar on "Intellectual Property Rights And Biotechnology" 22-02-2013 to 22-02- 2013 orgainzed by Department of Biotechnology conducted in Anna University, BIT Campus, Tiruchirappalli
- 8. FDP on "Cloud Computing" 06-05-2013 to 19-05-2013 organized by Department Of Computer Science Engineering and Information Technology conducted by Government College of Technology Coimbatore AICTE sponsored programme
- 9. FDP on "EC2202- Data Structures Using Oops" from 15-07-2013 to 19-07-2013 organized by Centre for Faculty Development TEQIP sponsored conducted in Anna University, Chennai

- 10. FPD on "Network Technologies and Security", from 04-05-2015 to 19-05-2015 sponsored by TEQIP II organized by Department Of Computer Science and Engineering in Bharathidasan Institute of Technology, Anna University, Tiruchirappalli- 620 024
- 11.Two Days International workshop on "Big Data Visualization and Graph Database", from 24.02.2016 and 25.02.2016, organized by Department of Computer Application at Anna University, BIT Campus, Tiruchirappalli 620 024
- 12.FPD on "Trends in Grid, Cloud and High Performance Computing", from 20-06-2016 to 03-07- 2016 sponsored by TEQIP II organized by Department Of Information Technology in Bharathidasan Institute of Technology, Anna University, Tiruchirappalli- 620 024
- 13.Hands-on Workshop on "Python Programming" 28-08-2017 and 29-08-2017 organized by Centre for Academic Courses, Anna University, Chennai and Sponsored by Centre for Faculty Development, Anna University Chennai and Conducted in University College Of Engineering, BIT Campus, Tiruchirappalli-620024
- 14.One Day workshop on "Scientific Programming with Python" organized by Department of Computer Science Engineering on 31.10.2017 and conducted in University College of Engineering, BIT Campus, Anna University, Tiruchirappalli.
- 15.Attended 12 week courses FDP(AICTEApproved) on NPTEL Massive Open OnlineCourses (MOOC) with NIT's, IISC and AICTE from July to October2018 with title of "Internet of Things".
- 16.Attended 08 week courses FDP(AICTEApproved) on NPTEL Massive Open Online Courses (MOOC) with NIT's, IISC and AICTE from July to October2018 with title of "Database management Systems".
- 17. Faculty Development Programme(FDP) on "Robotics and AI" organized by PDPM IIIT, Jabalpur in association with UCE, BIT Campus, Trichy from 24 th to 28 th June2019 at BIT Campus, Trichy.
- 18.Faculty DevelopmentProgramme(FDP) on "Deep Learning and Application" from 09.12.19 to 13.12.19 sponsored by E &ICT Academy An initiative of Ministry of Electronics& IT,Government of India" and conducted by University College of Engineering, BIT Campus, Tiruchirappalli.
- 19. Attended Online National Workshop on Basics of Documentation using Latex on 24,25,29 & 30 April 2020 organized by the Department of Mathematics, Stella Maris College(Autonomous), Chennai.
- 20. Completed "E-Learning program on Machine Learning" on 05.05.2020 conducted by Tata Steel, Capability Development.
- 21. Participated on "Machine Learning Quiz" in B.S.Abdur Rahman Cresent Institute Science and Technology, Vandalur, Chennai, School of Computer, Information and Mathematical Science organized by Department of Computer Applications on 9th May 2020.
- 22. Completed online Faculty Program on NBA organized by Bharati Vidyapeeth College of Engineering, Navi Mumbai on 10.05.2020(Certificate ID:T3IWHA-CE003116)

- 23. Participated on online seminar on "Research Methodology and its Tools" in B.S. Abdur Rahman Cresent Institute Science and Technology, Vandalur, Chennai, organized by Department of Computer Applications on 12.05.2020.
- 24. Participated on online Faculty Development Programme on "Trending Technologies" in B.S.Abdur Rahman Cresent Institute Science and Technology, Vandalur, Chennai, organized by Department of Computer Applications in association with Computer Society of India, from 14.05.2020 to 16.05.2020.
- 25.Participated on "Hands on FDP: Data Science using Python" organized by Department of Information Technology of Jeppiaar Institute of Technology on 18.05.2020 to 22.05.2020.
- 26. Participated on live webinar on "Demystifying AI Algorithms" in B.S.Abdur Rahman Cresent Institute Science and Technology, Vandalur, Chennai, organized by Department of Computer Applications ,School of Computer, Information and Mathematical Science on 26.05.2020.
- 27.Participated on one day "Hands on Webinar on Cloud Security Tools" organized by UG & PG Department of Computer Applications, Fathima College, Maduari on 28.05.2020.
- 28. Participated in the Two Days Faculty Development Programme on "Research Methodology" organized by Ramanujan club of Mathematics in association with IQAC, Jeppiaar Institute of Technoligy, Sriperumpudur from 01.06.2020 to 02.06.2020 through online Pedagogy.
- 29. Completed National Level Quiz on NBA organized by Padmabhushan Vasantdada Patil Pratishthan's College of Engineering, Mumbai, on 17.06.2020(Certificate ID: BSWISM-CE004560)
- 30.Completed National Level Quiz on NACC organized by Padmabhushan Vasantdada Patil Pratishthan's College of Engineering, Mumbai, on 17.06.2020(Certificate ID: OQBUQC-CE008282)
- 31.Participated on Webinar on "Computational Biology using Machine Learning" in B.S.Abdur Rahman Crescent Institute Science and Technology, Vandalur, Chennai, organized by Department of Computer Applications on 22.06.2020.
- 32. Participated in Industrial Training in BSNL on Communication and Networking Technologies from 08.06.2020 to 26.06.2020
- 33. Faculty Development Programme (FDP) on "Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB" from 13.07.2020 to 24.07.2020 sponsored by E &ICT Academy An initiative of Ministry of Electronics& IT, Government of India" and conducted by University College of Engineering, BIT Campus, Tiruchirappalli.
- 34.Attended five days online Faculty Development programme on "LATEX", organized by university college of engineering, BIT Campus, Trichirappalli in association with spoken tutorial, IIT Bombay from 10.08.2020 to 14.08.2020.
- 35. Faculty Development Programme (FDP) on Student Induction UHV online Workshop" Incorporating Universal Human Values in Education" from 31.01.2022 to 04.02.2022 conducted by All India Council for Technical Education, New Delhi.

- 36.Attended 04 week courses FDP (AICTE Approved) on NPTEL Massive Open Online Courses (MOOC) with NIT's, IISC and AICTE from Jan to March 2023 with title of "Python for Data Science".
- 37. Attended 4-Week Faculty Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" from 22 March 20 April, 2023
- 38.Attended 08 week courses FDP (AICTE Approved) on NPTEL Massive Open Online Courses (MOOC) with NIT's, IISC and AICTE from Jan to March 2024 with title of "Data Mining".
- 39.Attended 12 week courses FDP (AICTE Approved) on NPTEL Massive Open Online Courses (MOOC) with NIT's, IISC and AICTE from Jan to March 2024 with title of "Cloud Computing".
- 40. Attended Online Mandatory Teacher Trainings (First Four Modules) September 2023 National Institute of Technical Teachers Training and Research Taramani, Chennai-600113. (Ministry of Education, Government of India).

> Publications:

a. Books Chapter:

1. R.Jayamala and A.Valarmathi, "FSRmSTS – An Optimize Task Scheduling with a Hybrid Approach: Integrating FCFS, SJF, and RR with Median Standard Time Slice", "Resource Management in Distributed Systems", "*Studies in Big Data*", ebook ISBN: 978-981-97-2644-8, Hardcover ISBN: 978-981-97-2643-1, edition no. 1, (https://www.springer.com/series/11970).

b. International Journals:

- 1. R.Jayamala, V.Eswari, K.Marimuthu Published a paper titled "Multi Factor Authentication Protocols for a Secured Wsn", in International Journal of Applied Information Systems (IJAIS) on May 2012, Volume 2– No. 2, 35-39, ISSN: 2249-086
- S. Dhanalakshmi, R. Jayamala , "Energy efficient communication between Transgression nodes on manet", International Journal of Computer science and Information Technology (I J C S I T) on Dec 2012, vol 2, pp.139-144, ISSN: 0974-8385
- 3. M.ilaiyaraja, P.BalaMurugan, R.Jayamala, "Securing Cloud Data using Cryptography with Alert System", International Journal of Engineering Research & Technology (IJERT) on Vol. 3 Issue 3, pg.98-101, March 2014, ISSN: 2278-0181
- 4. V.Sivarajani, R.Jayamala, "Optimization of workload prediction based on map reduce frame work in a cloud system", International Journal of Research in Engineering and Technology(IJRET) on Volume 3, Issue 3; Pg: 264-266, March 2014, e-ISSN: 2319-1163, p-ISSN: 2321-7308
- 5. Bavithra S and Jayamala R, "Optimal Clustering Qos History Record Based Service Composition For Big Data Applications", International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE) on Volume 21 Issue 1 APRIL 2016, ISSN: 0976-1353
- K.Soundarya and R. Jayamala, "Multi-Objective Optimal Resource Allocation Using Improved ACO", International Journal of Emerging Technology in Computer Science & Electronics (IJETCSE) on Volume 21 Issue 1,pg:80-83 – APRIL 2016, ISSN: 0976-1353

- 7. Pandi selvi Gunasekaran and Mrs. R. Jayamala, "Non Linear Technique for Predicting Energy Consumption" International Journal of Applied Engineering Research, Volume 14, Number 15, 2019, ISSN 0973-4562.
- 8. R.Jayamala, A.Valarmathi ,R.Gayana, "An Analysis on Secured Live Migration in Cloud Environment", International Journal of Advanced Research in Basic Engineering Sciences and Technology (IJARBEST), Volume.6, Issue. 8, Pages.63-67, 2020, Publisher.ISSN (ONLINE):2456-5717.
- 9. R Jayamala, A Valarmathi, "An enhanced decentralized virtual machine migration approach for energy-aware cloud data centers", Intelligent Automation And Soft Computing, Volume.27, Issue.2, Pages.347-358,2021 (Annexure I)
- 10.Suma Sira JACOB*, Balasubramaiam KARTHIKEYAN, Thiraviasami JOHNPETER, Rengaswamy JAYAMALA "Deployment with Location Knowledge by Multi Area Approach for Detecting Replica Nodes in Wireless Sensor Network", Technical Gazette 31, 1(2024), 254-261, https://doi.org/10.17559/TV-20230508000613, ISSN 1330-3651 (Print), ISSN 1848-6339 (Online), Impact Factor 0.9
- 11. Jayamala R., Shanmugapriya N., Lalitha K. and Vijayarajan P., "A deep learning model and optimization algorithm to forecasting environment monitoring of the air pollution", Global NEST Journal, Vol 25, No 10, pp 47-55, ISSN: 1790-7632, Impact Factor:1.4, 2023
- 12. R Jayamala, A Sheryl Oliver, J Jayanthi, "Enhanced Secured and Real-Time Data Transmissions in Wireless Sensor Networks using SFRT Routing Protocol", Tehnički vjesnik, Technical Gazette, Volume. 31, Issue. 2, Pages. 420-425, 2024 ISSN 1330-3651 (Print), ISSN 1848-6339 (Online), Impact Factor 0.9

c. National Journals:NIL

> Conferences

a. International Conferences:

- 1. L.T.Thai and R.Jayamala Published a paper titled "En-Route Web Caching in Trustworthy Structured Peer-To-Peer Networks", in IJCA Proceedings on International Conference on VLSI, Communications and Instrumentation (ICVCI) (13):17–20, 2011
- 2. V.Sakthivelmuugan, R.Jayamala, "Efficient task scheduling and execution in cloud Computing", in OSIET journal of Computer Science Engineering on May 2012, ISSN: 2319-5967
- 3. R.Jayamala, Alaghupriya , " A Multiobjective Task Scheduling in Multicloud using enhanced GA approach", International Conference on Science and Technology on 30-31 March 2016
- 4. Presented Paper titled "An Investigation of Scheduling algorithm and their metrics in Cloud Computing"_in IEEE Sponsored International Conference on Computation of

- Power, Energy, Information and Communication on 22 and 23 March 2017 (Scopus Index).
- 5. Gayana R, Jayamala R and Valarmathi A, A SECURE DECENTRALIZED VIRTUAL MACHINE MIGRATION APPROACH IN CLOUD ENVIRONMENT, ICSSIT 2020 (Third International Conference on Smart Systems and Inventive Technology)
- **6.** Rameshkanna N, Thirumoorthi M, Dr. R. Jayamala, "Hand Gesture Recognition System with Voice Commands for Desktop Control", International conference on "Innovation and Advances Cognitive in Systems", held at Builders College Kangayam, Tamilnadu on 27-28 May 2024.

b. National Conferences:

1. Published a paper titled "Enhanced Security Scheme using two factor user authentication protocol for real time wireless network", in National Conference on Recent Trends in IT on 6th January 2012 at SSM College of Engineering, Komarapalayam.