

Dr. S. Poongodi M.Sc., M.Phil., Ph.D. NET

Name : Dr. S. POONGODI
Designation : Associate Professor
Department : Data Science (UG)
Qualification : M.Sc. M.Phil., Ph.D. NET
Experience : 17.5 Years
Area of Specialization : Data Mining & Machine Learning
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ACADEMIC QUALIFICATIONS

Degree	Branch	Institution/University	Year of Graduation
Ph.D.	Computer Science	Bharathiar University, Coimbatore	2020
M.Phil.	Computer Science	Mother Teresa Women's University, Kodaikanal (First Class)	2004

ADDITIONAL QUALIFICATIONS

- UGC-NET Qualified (January 2018).
- Certified Entrepreneurship Educator, Wadhwani Entrepreneur (27 February 2025).

RESEARCH EXPERIENCE

- A recognized MPhil guide in Bharathiar University during 2006 and produced 6 MPhil scholars
- Completed Ph.D. in Computer Science with specialization in Data Mining from Bharathiar University, Coimbatore, in 2020, and is currently guiding one Ph.D. research scholar.
- Published 15 research articles, conference proceedings, and book chapters in reputed IEEE Xplore, SCI(E), ESCI, Scopus-indexed journals and edited volumes, and presented 16 research papers at national and international conferences

LIST OF PUBLICATIONS IN INTERNATIONAL JOURNALS / CONFERENCE PROCEEDINGS

- Dr. S. Poongodi et al., "Machine Learning-Based Prediction of Live Birth Outcomes in IVF/ICSI Couples with Male Factor Infertility Using Pearson Correlation and XGBoost," *MSW Management – Multidisciplinary, Scientific Work and Management Journal*, ISSN: 1053-7899, Vol. 36, Issue 1, 2026, pp. 4767–4772.
- S. Poongodi, et al., "Adaptive Intelligent Optimization Model for Enhanced Medical Image Analysis and Predictive Diagnosis Using Heterogeneous Healthcare Data,"

Proceedings of the 2025 First International Conference on Advances in Engineering and Computing Technologies for Sustainable Development (AECTSD 2025), IEEE Technically Co-Sponsored conference, Sri Ramakrishna Engineering College, Coimbatore, Tamil Nadu, India, 12–13 December 2025. Published in IEEE Xplore (Scopus Indexed). DOI: <https://doi.org/10.1109/AECTSD65988.2025.11411046>.

- S. Poongodi, et al., "An Enhanced Approach for Early Chronic Kidney Disease Prediction using Advanced Machine Learning and Data Processing Techniques," *Proceedings of the 8th International Conference on Inventive Computation Technologies (ICICT 2025)*, Tribhuvan University, Nepal, 23–25 April 2025. Published in IEEE Xplore (Scopus Indexed). Proceedings ISBN: 979-8-3315-1223-1.
- Dr. S. Poongodi and Ms. Amritha Varma, "Weather Forecasting using Machine Learning," *International Journal of Research and Analytical Reviews (IJRAR)*, E-ISSN: 2348-1269, Vol. 9, Issue 1, June 2022.
- Dr. N. Kamalraj and Dr. S. Poongodi, "An Efficient Big Data Analytics in Grid Framework Using Ant Colony Optimization (ACO) Algorithm," *International Journal of Future Generation Communication and Networking*, ISSN: 2233-7857, Vol. 13, No. 4, 2020, pp. 4405–4416. (ESCI Indexed).
- S. Poongodi and M. Rajesh Babu, "Analysis of Crop Suitability using Clustering Technique in Coimbatore Region of Tamil Nadu," *Concurrency and Computation: Practice and Experience*, Online ISSN: 1532-0634, 02 May 2019. (SCI Expanded (SCIE) and Scopus Indexed). DOI: <https://doi.org/10.1002/cpe.5294>.
- S. Poongodi and M. Rajesh Babu, "Prediction of Crop Production using Improved C4.5 with ANFIS Classifier," *Journal of Advanced Research in Dynamical and Control Systems*, ISSN: 1943-023X, Vol. 9, Special Issue 6, 2017, pp. 1427–1442. (Scopus indexed and UGC-approved journal).
- S. Poongodi and M. Rajesh Babu, "Supervised and Semi-Supervised Clustering Based on Feature Selection Algorithm Process," *International Journal of Innovations in Scientific and Engineering Research*, ISSN: 2347-9728, Vol. 3, Issue 12, December 2016.
- S. Poongodi and M. Rajesh Babu, "A Survey on Prediction of Crop Cultivation Based on Soil Condition and Rainfall Data using Data Mining Approach," *International Journal of Applied Engineering Research*, ISSN: 0973-4562, Vol. 10, No. 20, 2015. (Scopus Indexed Journal).

BOOKS & BOOK CHAPTERS

- Published a **book** entitled “Programming in C”, Multi-Spectrum Publications, ISBN No.: 978-81-19419-85-2 in 2023.
- Published a Book Chapter titled “Exploration of Powerful Data Analytics Tools” in the Book Multidisciplinary Exploratory Research in Advanced Technologies with ISBN No.

978-93-93622-21-1 (May 2022) Chapter 13, pp. 123-130 by IOT Academy Publishers, Coimbatore.

- Published a book chapter entitled “Thinking Beyond Computational Thinking” in the book titled Computer Science with ISBN: 9789393-622150 by IOT Academy Publishers, Coimbatore in November 2022.
- Published a book chapter entitled “A Research Methodology for Exploring Big Data Analytics Problem Solving Solutions” in the book titled Current Trends in Multidisciplinary Research with ISBN: 9789395-196512 by ESN Publications, Chennai in January 2023.
- Published a book chapter entitled “The Role of Artificial Intelligence in Redefining Modern Farming Practices” in the book titled Applications of Artificial Intelligence with ISBN: 9789393-622310 by IOT Academy Publishers, Coimbatore in June 2023.
- Published a book chapter entitled “Crafting Intelligence: Core Technologies in Generative AI” in the book titled “Uncovering Advances at the Intersection of Multidisciplinary Research” with ISBN: 978-81-976326-6-2 by R.K. Creative Solutions.

PAPER PRESENTATIONS

- Presented a paper titled "Cyberattack Detection using Ensemble Learning (Random Forest, XGBoost, LightGBM) and Explainable AI (SHAP/LIME) for Intrusion Detection Systems" at the International Conference on Outstanding Research, Business Innovation and Technology (ORBIT 2026), organized by LKP Academy in association with Leilani Katie Publication and Press, on 30 June 2026, and published in the conference proceedings.
- Presented a paper titled "Vibe Coding Debt: A Conceptual Framework for Understanding Hidden Long-Term Risks in AI-Assisted Software Development" at the National Conference on *Emerging Convergence of Artificial Intelligence, Internet of Things and Cyber Security (CONVERGE 2026)*, organized by the Department of Computational Sciences, PSGR Krishnammal College for Women, Coimbatore, on 23 January 2026.
- Presented a paper titled "Deconstructing the Real-Time Paradigm: A Comparative Framework for AI-Driven Decision-Making in Big Data Analytics" at the National Conference on *Emerging Convergence of Artificial Intelligence, Internet of Things and Cyber Security (CONVERGE 2026)*, organized by the Department of Computational Sciences, PSGR Krishnammal College for Women, Coimbatore, on 23 January 2026.
- Presented a paper titled "An Overview of Authentication and Authorization Techniques for Secure Systems: A Systematic Literature Review" at the National Conference on *Emerging Convergence of Artificial Intelligence, Internet of Things and Cyber Security (CONVERGE 2026)*, organized by the Department of Computational Sciences, PSGR Krishnammal College for Women, Coimbatore, on 23 January 2026.
- Presented a paper titled "Adaptive Intelligent Optimization Model for Enhanced Medical Image Analysis and Predictive Diagnosis Using Heterogeneous Healthcare Data" at the IEEE Technically Co-Sponsored First International Conference on Advances in Engineering and Computing

Technologies for Sustainable Development (AECTSD 2025), organized by Sri Ramakrishna Engineering College, Coimbatore, Tamil Nadu, India, on 12–13 December 2025.

- Presented a paper titled "Big Data Analytics: Applications, Benefits, Future Scope, and Case Studies" at the International Conference on *Emerging Technologies – Driving Industry 4.0 for Sustainable Development (ICETDISD 2K25)*, organized by the School of Computational Sciences, KG College of Arts and Science, Coimbatore, on 13 September 2025.
- Presented a paper titled "An Enhanced Approach for Early Chronic Kidney Disease Prediction using Advanced Machine Learning and Data Processing Techniques" at the 8th International Conference on Inventive Computation Technologies (ICICT 2025), held at Tribhuvan University, Nepal, on 23–25 April 2025.
- Presented a paper titled "Transforming Healthcare through Artificial Intelligence: Opportunities and Challenges" at the Two-Day International Conference on *Exploring Gen AI in Multidisciplinary Innovations and Contemporary Landscape (ICEGMICL 2025)*, organized by the Centre for Creativity, Research and Development, Dr. SNS Rajalakshmi College of Arts and Science (Autonomous), Coimbatore, in collaboration with Madhesh University, Nepal, and the Artificial Intelligence Medical and Engineering Research Society, Vijayawada, on 12–13 March 2025.
- Presented a paper titled "Deep Learning Model for Plant Leaf Disease Detection" at the 5th International Conference on Advanced Technologies for Societal Applications (Techno Societal 2024), organized by Shri Vithal Education & Research Institute, Pandharpur, on 13–14 December 2024.
- Presented a paper titled "Optimizing User Experience in Mobile E-Commerce Apps through Big Data Analytics" at the International Conference on *Commerce Nexus 2024 – Connecting Business, Technology, and Society*, organized by Sri Krishna Arts and Science College, on 15–16 February 2024, and published in the conference proceedings (Lambert Academic Publishing), ISBN: 978-620-747186-7.
- Presented a paper titled "IoT-Driven Wireless Patient Monitoring System in Smart Cities" at the International Conference on *Latest Innovation in Science and Technology (LIST 2023)*, organized by Providence College for Women, Coonoor, on 22 September 2023.
- Presented a paper titled "Artificial Intelligence Using Healthcare" at the International Conference on *Data Analytics, Artificial Intelligence, Cyber Security Technologies*, organized by Dr. SNS Rajalakshmi College of Arts and Science (Autonomous), Coimbatore, on 11 September 2023.
- Presented a paper titled "An Effective Discovery of Pattern in a Transactional Database using Apriori Algorithm" at the International Conference on *Intelligent Computing and Technology (ICICT 2023)*, organized by Sri Ramakrishna College of Arts and Science, on 10 March 2023, and published in the conference proceedings with ISBN: 978-93-91977-24-5.
- Presented a paper titled "An Effective Analysis of Presidential Campaign Finance Database using R" at the International Conference on *Challenges and Solutions in Data Science (ICCSDS 2023)*, organized by Navarasam Arts and Science College for Women, Erode, on 21 February 2023.

- Presented a paper titled "Big Data Analytics and Internet of Things (IoT) Convergence and Challenges" at the ICSSR Sponsored National Seminar on Industry 4.0, organized by Christ University, on 26 August 2022.
- Presented a paper titled "A Perspective Approach of Sentiment Analysis Types, Tools and Methods" at the International Conference on *Interdisciplinary Research Innovations in Science and Technology (ICIRIST 2022)*, on 10 May 2022.
- Presented a paper titled "Analysis of Housing Data to Predict House Price Using Multiple Linear Regression" at the National Level Virtual Conference, held on 22–23 September 2021, and published in the conference proceedings with ISBN: 978-93-91387-20-4.

PROFESSIONAL ACTIVITIES

UNIVERSITY ACADEMIC RESPONSIBILITIES

- University Nominee, Board of Studies, Department of Artificial Intelligence & Machine Learning, Kongunadu Arts and Science College, Coimbatore (17 March 2025).
- University Nominee, Board of Studies, Department of Computer Science (PG), AJK College of Arts and Science, Coimbatore (28 July 2023).

REVIEWER ASSIGNMENTS

- Reviewer, 1st IEEE International Conference on Emerging Technologies & Innovation for Sustainability (EmergIN 2024), Noida Institute of Engineering & Technology, Greater Noida, supported by ANRF, Government of India, 20–21 December 2024.
- Reviewer, National Conference on Artificial Intelligence and Machine Learning (NCAIML 2024), Department of Artificial Intelligence and Machine Learning, AJK College of Arts and Science, Coimbatore, 23 February 2024.
- Reviewer, International Conference on Computational Sciences and Sustainable Technologies (ICCSST 2023), CHRIST (Deemed to be University), Bengaluru, India and Modern College of Business and Science, Oman, 8–9 May 2023.

INVITED TALKS / RESOURCE PERSON

- Recognized as a Resource Person for the Six-Day Online Faculty Development Programme on "**Modern Computational Tools and Technologies**", jointly organized by the Department of Information Technology, Sri Ramakrishna Engineering College and the Department of Computer Science with Cognitive Systems, PSGR Krishnammal College for Women, 16–21 February 2026.
- Resource Person, Online Monthly Seminar on "**Enhancing Research with AI: Tools for Efficient Academic Writing**", organized by the Auxilium College Researchers Knowledge Network (ACRKN), Committee for Research Ethics, Publication & IPR, Auxilium College (Autonomous), Vellore, 31 May 2025.
- Resource Person, session on "**Information and Communication Technology (ICT)**" for the Two-Week Online Crash Course on UGC-NET/JRF/SET Paper-I, organized by Sri Ramakrishna Mission Vidyalaya College of Arts and Science (Autonomous), Coimbatore, 4 April 2025.

- Guest Speaker, One Week Technical Enrichment Programme (TEP) on "**Reskilling: The Transformative Role of Technology**", Marudhar Kesari Jain College for Women, Vaniyambadi, 23 January 2025.
- Resource Person, Expert Talk on "**Design the Future: A Guide to Design Thinking**", KG College of Arts and Science, Coimbatore, 6 November 2023.
- Resource Person, International Virtual Faculty Development Programme on "**Recent Trends on Research Methodologies, Tools and Techniques**", KG College of Arts and Science, 10–15 July 2023.
- Guest Speaker, Alumni Connect Webinar on "**Applications of Information and Communication Technology**" and International Webinar on "**Information Security**", Marudhar Kesari Jain College for Women, Vaniyambadi, 5 January 2022 and 18 July 2020.

AWARDS AND RECOGNITIONS

- Faculty Excellence Award – **Excellence in Mentoring**, SNS Institutions, Coimbatore (2025)