PSGR Krishnammal College for Women KCW

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Name : Dr. S. Kavitha

Designation : Assistant Professor

Department : Computer Science (UG)

Qualification : M.Sc., M.Phil., Ph.D.,

Experience : Teaching – 8 Years

Area of Specialization(s) : Data Mining, Image Processing Machine Learning, Deep Learning

Email : kavitha@psgrkcw.ac.in

Academic Credentials

- Ph.D. (CS) : L. R. G. Government College for Women, Tirupur, 2018 - 2025
- M.Phil (CS): Dr. G. R Damodaran College of Science, Coimbatore, 2015
- M.Sc (CS) : Dr. N. G. P. Arts and Science College, Coimbatore, 2003 - 2005
- BCA   : Dr. N. G. P. Arts and Science College, Coimbatore, 2000 - 2003

Academic Experience

- Assistant Professor, P.S.G.R Krishnammal College for Women, Coimbatore (June 2018 – Present)

Industry Experience

- Software Developer, Aosta Software Technologies, Coimbatore (2005 – 2012)
  Tools/Languages Used: Asp.Net, SqlServer2000, Html, JavaScript

Subjects Taught

- Programming Languages: C, C++, Java, .NET Technologies, Java Script, HTML
- Database Systems: RDBMS, SQL
- Specialized Courses: Software Testing, Data Mining Techniques, Mobile Application Development, Computer Networks, Cloud Computing Technologies

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Academic Services & Responsibilities

College Level

- Rotaract Club - Staff Coordinator for the College
- NIRF Coordinator

Department Level

- ISO Incharge
- NAAC – Criteria 6- Incharge
- Class Incharge
- Project Guide
- Admission Incharge
- E-content Developer

Publications

1. "**Survey of Routing Protocols for Mobile ad-hoc Network**", National Conference on Current Trends in Mobile Networks and Agent Technology, Dr. G. R. Damodaran College of Science, November 2012.

2. "**Improving Data Accessibility in MANET with Node Mobility algorithm**", International Journal of Computer Science, Reference ID: IJCS-064, Volume 2, Issue 2, No 3, 2014.

3. "**Sensor Based Smart Garbage Management System**", International National Conference on Advances in Information Technology and Networking, Dr. G. R. Damodaran College of Science, February 2016.

4. "**A Survey Paper on Basics of Data Mining**", National Conference on Advanced Computing, Bharathiar University, 25.01.2019.

5. "**A Study on Data Mining in Health Care**", National Conference on Intelligent Learning and Computing, Sri Krishna Arts and Science College,13.02.2019.

6. "**Establishing the efficiency of algorithms in data mining for users**", International Conference on Emerging trends and challenges, NPR Arts and Science College, 28.12.2018.

7. "**An Analysis on Crop Yield Prediction using Data mining Techniques**", 7th National Conference on Recent Trends and Advances in the Field of Information Technology, Karpagam Academy of Higher Education, 27.09.2019.

8. "**Prediction of Hospital Re-Admission among Diabetic Patients**", National Seminar on Computing Platforms for Biological Big Data Analytics" organized by Dr. N. G. P Arts and Science College on 5.02. 2020.

9. "**A Review Paper on Unsupervised Feature Selection Algorithms**", National Conference on Machine Learning and Smart Technology, Sri Krishna Arts and Science College, 12.02.2020.

10. "**Smart Hospital Management Using IOT**", International Conference on Data Analytics and Computational Mathematics, Sri Ramakrishna College of Arts and Science for Women on 29.02.2020.

11. "**A Survey on Feature extraction and Classification Techniques for prediction of Plant Disease**", 4th International Conference on Current Scenario in Pure and Applied Mathematics, Kongunadu Arts and Science College, 29.01.2021 & 30.01.2021.

12. "**Automatic Room Lights System Using Arduino Sensor and IR Sensor**", CiiT International Journal of Digital Signal Processing, Vol 13, No 1, January 2021.

13. "**RFID Based Authentication System**", CiiT International Journal of Digital Signal Processing, Vol 13, No 1, January 2020.

14. "**De-noising of tomato fruit image using spiral seed filter**", IT in Industry, vol. 9, no.1, 2021, Web of Science, published online 03-March-2021.

15. "**A Review on Image Segmentation algorithms for disease detection in leaves and fruits**", Journal of Emerging Technologies and Innovative Research, February 2022.

16. "**RPA in Medical Care**", National Conference on Applications of Intelligent Robotic Process Automation, 25, March, 2022.

17. "**RPA with Machine Learning**", National Conference on Applications of Intelligent Robotic Process Automation, 25, March, 2022.

18. "**RPA with APRUPT sensor**", National Conference on Applications of Intelligent Robotic Process Automation, 25, March, 2022.

19. "**Fish Culture Automation Using IoT**", International Conference on Comprehensive Aspects of Cognitive Systems, 10th May 2022.

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20. "**A Review on Image Segmentation algorithms for disease detection in leaves and fruits**", Journal of Emerging Technologies and Innovative Research, February 2022, Volume 9, Issue 2.

21. "**A Review on Fruit Disease Detection and Classification Using Computer Vision Based Approaches**", International Journal of Innovative Science and Research Technology (IJISRT), March, 2022, Volume 7, Issue 3.

22. "**Multi-scale region-of-interest based deep learning for fruit disease identification and classification**", ARPN Journal of Engineering and Applied Sciences, Volume 18, February 2023.

23. "**Blooming Trends in Digital Forensics**", Technovanza'23, PSGR Krishnammal College for Women, 19.10.2022.

24. "**A Study on Deep Learning: Network and Applications**", International Conference on Computing and Intelligent System (ICCIS'23), Sri Krishna Adithya college of arts and science, 24.01.2.2023 and 25.01.2023.

25. "**Influence of AI And IOT In Agriculture**", International conference on Advanced Computing ICAC-2023, Bharathiar University, 02.03.2023 and 03.03.2023.

26. "**Stemming Algorithms for Various Languages Using NLP**", International conference on Advanced Computing ICAC-2023, Bharathiar University, 02.03.2023 and 03.03.2023.

27. "**Molecular Analysis of Bacteria isolated from the soil for its potential Agnostic activity**", Research Journal of Pharmacy and Technology, Volume 15 Issue 9, 2022.

28. "**A novel shadow removal adversarial network with multi-scale ROI-based deep model for classification of fruit diseases**", INASS: International Journal of Intelligent Engineering and Systems, ISSN: 2185-3118, Volume.16, No.6, September / 2023.

29. "**Brain Computing Interface**", International Conference on Computational Intelligence and Communication Technologies ICCICT – 2024", 04.01. 2024 at Dr. N.G.P Arts and Science College, Coimbatore.

30. "**Human-Centric Industry 5.0**", International Conference on Computational Intelligence and Communication Technologies ICCICT – 2024", 04.01. 2024 at Dr. N.G.P Arts and Science College, Coimbatore.

31. "**Neural Style Transfer Using Deep Learning**", National Conference on Next Gen Information Science, Communication and Technology, 04.10.2024 at SRM Institute of Science and Technology.

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32. "**An Improved Multi-Scale Region of Interest Deep Learning Model for Fruit Disease Classification**", JES: Journal of Electrical Systems. Vol. 20, No. 6s, pp. 3070 – 3080, (2024).

33. "**Review of Machine Learning and Deep Learning Models for Fruit Disease Classification: Challenges and Trends**", International Conference on Blooming Fuzzifier Logic (ICBFL-2024), 21.10.2024 at Chikkanna Government Arts College.

34. "**A Multi-Scale Deep Learning Model based on Random Sampling for Fruit Disease Classification**", National Conference on Emerging Trends in Integrated Intelligence and Technologies (NCETIIT'2025), 17.02.2025 at Chikkanna Government Arts College.

35. "**Filtering Political Sentiment in Social Media Using Textual Information**", International Conference on Diversity in Computational Excellence, 30.01.2025 & 31.01.2025 at Bharathiar University.

36. "**Harvesting the Future: AR/VR's Role in Sustainable Agriculture**", National Conference on Emerging Trends and Opportunities in Augmented, Virtual and Mixed Reality (NCETOAVMR'2025), 24.02.2025, 25.02.2025, PSGR Krishnammal College for Women.

37. "**Immersive Marketing Strategies Using Augumented Reality / Virtual reality**", National Conference on Emerging Trends and Opportunities in Augmented, Virtual and Mixed Reality (NCETOAVMR'2025), 24.02.2025, 25.02.2025, PSGR Krishnammal College for Women.

38. "**Revolutionizing Phobia Treatment: The Role of AR and VR in Exposure Therapy**", National Conference on Emerging Trends and Opportunities in Augmented, Virtual and Mixed Reality (NCETOAVMR'2025), 24.02.2025, 25.02.2025, PSGR Krishnammal College for Women.

39. "**AR, VR in Crime Scene Investigation**", National Conference on Emerging Trends and Opportunities in Augmented, Virtual and Mixed Reality (NCETOAVMR'2025), 24.02.2025, 25.02.2025, PSGR Krishnammal College for Women.

40. "**Embedded Systems and Robotics**", Second International Conference on Research Perspectives in New- Gen Computational Paradigms (ICRPNCP 2025), 12.08.2025, 13.08.2025, St. Joseph's College for Women.

41. "**Next Generation Internet Software**", Second International Conference on Research Perspectives in New- Gen Computational Paradigms (ICRPNCP 2025), 12.08.2025, 13.08.2025, St. Joseph's College for Women.

42. **"Transitioning From Nature to Noise: A Shift in Cryptography''**, Second International Conference on Research Perspectives in New- Gen Computational Paradigms (ICRPNCP 2025), 12.08.2025, 13.08.2025, St. Joseph's College for Women.

43. "**Securing Generative AI Models from Prompt Injection Attacks**", International Conference on Emerging Technologies - Driving Industry 4.0 for Sustainable Development, KG College of Arts and Science, 13.09.2025.

Books Published

- **Data mining: Lab Manual**, Amazon Kindle Edition, December, 2022
- **Multiple Choice Questions with Answers on Software Process Management,** Amazon Kindle Edition, December, 2022
- **Multiple Choice Questions with Answers on Virtualization and Cloud Computing,** Amazon Kindle Edition, December, 2022
- **Lab Manual for Jenkins,** Amazon Kindle Edition, January, 2025
- Innovations in Engineering Research through Artificial Intelligence and Machine Learning - Smart Road Safety Real Time Accident Detection and Speedy Recovery Notification System Using AI, ISBN: 978-93-343-6146-9, July, 2025.

Certifications

- NPTEL Online Certification (Elite) – Introduction of Internet of Things
- Courses on C, C++, SQL, HTML (SoloLearn Platform) Certifications through Coursera

Awards

- Appreciation Award by the Tamil Department of PSGRKCW on International Women's Day, 8 March, 2024
- Awarded by Rotary International District for Supportive Faculty Coordinator for her dedicated mentorship and unwavering encouragement.

Strengths

- Strong mentoring and leadership skills
- Quick learner, confident, and highly dedicated

- Ability to work independently and collaboratively
- Passionate about delivering quality education