1. Name : Dr. S. Kavitha

2. Designation : Assistant Professor

3. Qualification : M.C.A., M.Phil., Ph.D.

4. Mobile number : 994241706

5. E-mail id : kavithasenthil@auxiliumcollege.edu.in

6. Teaching Experience : 21 years

7. Area of specialization : Programming Languages, Data Mining, Software Engineering, Machine Learning, Data Science

8. Positions Held in Auxilium:

Dean of Science from 2007 to 2010

Head of the Department of UG, PG and Research Department of Computer Science from 2007 to 2017

• Website Coordinator from 2007 to 2016

• Staff Evaluation In-charge from 2008 to 2016

• IQAC Member from 2008 to 2016 and 2020 to 2021

• Chief Examiner for conducting Chartered Accountant Examination from 2016 to 2020

 Mentoring UG and PG Students to complete MOOC Courses like NPTEL, Swayam and Coursera online short term courses from 2019 to 2020.

• SPOC for SWAYAM - NPTEL Local Chapter (NPTEL's brand Ambassador) from 2020 to 2022

• Research Cell Member from 2024 to till date.

9. Research Experience and Guidance : 13 year Experience and 38 Students Guided (M.Phil.)

- 10. No. of Papers Published : 30
- 11. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences : 11
- 12. No. of Seminars/Workshops/Conferences organized: 13
- 13. Other bodies (Descriptive)
 - Selection Committee Member for the post of Guest Lecturer in the Department of Computer Science in Thiruvalluvar University Constituent colleges on 11th July 2013
 - Acting as an External Examiner in practical in Thiruvalluvar University and Autonomous Colleges.
 - Acting as an Examiner in central Valuation in Thiruvalluvar University and Autonomous Colleges.
 - Question paper setter in various Autonomous Colleges(Islamiah college, vaniyambadi, D.K.M. College, Vellore, Bishop Heber College, Trichy, Adhiparasakthi College, Kalavi, Theivani Ammal College, Villupuram, Muthurangam Government Arts College(Autonomous), Vellore, Arcot Mahalakshi college.

14. Any Other (Descriptive):

Patent & Copyright Filed

- 1. Indian Design Patent Titled "IOT Based Smart Irrigation System", Application No. & Date: 13445 & 16-02-2023, Publication Date: 05-05-2023, Link: https://search.ipindia.gov.in/DesignApplicationStatus/.
- 2. UK Design Patent Titled "Solar Plant Health Monitoring System", Design No. 6392288, Grant Date 27-09-2024, https://www.registered-design.service.gov.uk/find/6392288
- 3. Indian Utility Patent Titled "QR Code-Based System for the Identification and Management On Campus", Application No. 202541012469", Publication Date 21/02/2025, https://iprsearch.ipindia.gov.in/PatentSearch/PatentSearch/ViewApplicationStatus

4. Copyright Titled "Student Late Attendance Monitoring using Barcode", Application No.: 10972/2025-CO/L, Publication Date 01/07/2025.

Book Publications

- 1. Dr. S. Kavitha, "Internet Of Things", ISBN No.: 978-93-6260-169-8 Charulatha Publications, Chennai.
- 2. Dr. S. Kavitha "Foundation of Data Science", ISBN No.: 978-93-6260-493-4 Charulatha Publications, Chennai.

Awards Received

- 1. Dr. S. Kavitha, Best Faculty Award, Silampoli Foundation, June 2024.
- 2. Dr. S. Kavitha, A.P.J Abdual Kalam Award, Tamil Thaai Foundation, June 2024
- 3. Dr. S. Kavitha, Iconic Award 2024, Tamil Thaai Foundation, November 2024.
- 4. Dr. S. Kavitha, Best Women Faculty cum Researcher Award, Puducherry Arts and Research Academy(Para) in collaboration with RAAK Arts and Science College, Chidambaram ,16 March 2025.

Reviewer

• Reviewer for International conference Emerging Research in computing, Information, communication, Artificial Intelligence & machine Learning organized by NITTE Meenakshi Institute of Technology & NMIT, Bengaluru, India on 23 and 24 February 2024.

Additional Activities

Technical Talks (Chief Guest/Guest Lecturer)

- Judge for Brain Teaser (Quiz) TECHINTELLECT'14 at M.M.E.S Women's Arts and Science College, Melvisharam, on 15th February 2014.
- Delivered Special Awareness Lecture on "NPTEL-SWAYAM & ONLINE COURSES" at Abdul Hakeem College (Autonomous) on 17th March 2020.
- 5. Delivered a talk on "Introduction on Data Science" at D.K.M College for Students on 31st March 2003.
- 6. Delivered a Talk on "Institutional ERP Faculty Induction Programme-II" at Auxilium College on 13th June 2025.
- 7. Resource Person for Hands-on workshop on "AI TOOLS" at Mathematics Association, Auxilium College (Autonomous) on 20th August 2025.
- 8. Resource person for International conference on utilising AI: Prospects for women, Puducherry Arts and Research Academy(Para) in collaboration with RAAK Arts and Science College, Chidambaram ,16 March 2025.

PUBLICATIONS

- 1. Mrs. Kavitha S., Ms. Sindhu S. "Comparison of Integrated Development Environment (IDE) Debugging Tools: Eclipse Vs Net beans", International Research Journal of Engineering and technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-2, Issue 4, 2015.
- 2. Divya G.R., Kavitha S., "Evolving a Ultra-Flow Software Development Life cycle Model", International Research Journal of Computer Techniques, ISSN: 2394-2231, Vol-2 Issue 4, 2015.
- 3. Kavitha S., Shanthi C. "Software Vulnerability Prediction using Feature Subset Selection and Support Vector machine", International Research Journal of Engineering and technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-2 Issue 4, 2015.
- 4. Kavitha S., Nancy A. "Comparative Study on Extended Entity Relationship and Unified Modelling Language", International Research Journal of Engineering and technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-2 Issue 4, 2015.
- 5. Kalaivani S., Kavitha S., "Comparative Study on Software Project Management Models", International Research Journal of Engineering and technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-2 Issue 4, 2015.
- 6. Jeevavallavi S.A., Kavitha S., "Test Code Quality with Issue Handling Performance", International Research Journal of Engineering and technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-2 Issue 4, 2015.
- 7. Amala J., Kavitha S., "Improved Software Project Scheduling by Event Based Optimization", International Journal of Advanced and Innovative Research, ISSN: 2278-7844, Vol-5 Issue 5, 2016.

- 8. Kavitha S., Dhatchayini A., "Experimental Study of Software Quality Issue For SAP", International Research Journal of Engineering and Technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-3 Issue 5, 2016.
- 9. Mahalakshmi S., Kavitha S., "Software Program Plagiarism Detection using Longest Common Subsequence Method", International Research Journal of Computer Techniques, ISSN: 2394-2231, Vol-3 issue-4, 2016.
- 10. Divya S., Kavitha S., "Reduce the Internal and External Interruptions and improving Communications using Enhanced Advanced Pomodoro Technique in Agile Software Development", International Research Journal of Engineering and Technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-4 Issue 7, 2017.
- 11. Felicia Rose Anandhi D., Kavitha S., "Analysing code Quality for Runtime Code Smell Detection using McCabe", International Research Journal of Engineering and Technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-5 Issue 8, 2018.
- 12. Kavitha S., Divya "Automated Error Detection for Python using Jenkins", International Research Journal of Engineering and Technology, e-ISSN: 2395-0056, p-ISSN: 2395-0072, Vol-5 Issue 8, 2018.
- 13. Kavitha S., "A Comparative Analysis of Open Source Automated Web Testing Tools", International Journal of Computer Techniques, ISSN: 2394-2231, Vol-5 Issue 6, 2018.
- 14. Kavitha S., "Empirical Study on Data Mining Techniques for Breast Cancer Diagnosis", Journal of Emerging Technologies and Innovative Research, ISSN: 2349-5162, Volume 6, Issue 9, 2019.
- 15. Nivetha, Kavitha S., "Bidirectional Recurrent Neural Network Language Model Cross Entropy Churn Metrics For Defect Prediction Modelling", International Journal of Engineering & Advanced Technology, ISSN: 2249-8958, Volume 8, Issue 6, 2019.
- 16. Kavitha S., "Automotive Software Process Improvement in Software Product Line using ASPLA Model", International Journal of Scientific & Technology Research, ISSN: 2277-8616, Volume 8, issue 12, 2019.
- 17. Priyanga Devi S., Kavitha S., "A Systematic Code Quality Improvement using Rational Rose and Python for Execution in Self Adaptive System Models", International Journal of Interdisciplinary Research & Innovations, ISSN: 2394-2231, Volume7, issue-3, 2019.
- 18. Vidyaathulasiraman, Kavitha S., "Risk Prediction System using Data Mining Techniques in Gynecological Ovarian Cancer", ICTACT Journal on Soft Computing(IJSC), ISSN: 2229-6956, Volume 9, Issue 4, 2019.
- 19. Kavitha S., Sindhuja & Dr. Vidyaathulasiraman "Empirical View of Convolutional Neural Network in Health care Using Deep Learning Techniques", Journal of Information and Computational Science, ISSN: 1548 7741, Volume-10, Issue-9, 2020.
- 20. Surekha V., Kavitha S., "An Assessment Model to Foster the Adoption of Agile Software Product Line in the Automotive Domain", An International Open Access Journal-Journal Emerging Technologies and Innovative Research, ISSN-2349-5162, 2019.

- 21. Kavitha S., Dr. Vidyaathulasiraman "Optimized Detection of Ovarian Cancer Using ROI Based Segmentation and Classification with FR-CNN", Materials Today: Proceedings International Journal of Grid and Distributed Computing, ISSN: 2005-4262, Vol. 13, No. 2, (2020), 2020.
- 22. Kavitha S., Sindhuja C. "Ovary Tumor Prediction using R-C NN", International Journal of Advanced Research in Engineering and Technology(IJARET), ISSN print 0976-6480 and ISSN Online :0976-6499, Volume 11, Issue 10, 2020.
- 23. Kavitha S., Dr. Vidyaathulasiraman "Identification of Proper Machine Learning Classification Model based on Image Annotation Techniques", Annals of R.S.C.B, ISSN-1583-6258, Vol. 25, Issue 4, 2021.
- 24. Kavitha S., Dr. Vidyaathulasiraman, "Identification and Classification of Early Stage Ovarian Cancer using Convolutional Neural Network", Elementary Education Online, ISSN: 1908-1924, Vol 20- Issue 4, 2021.
- 25. Kavitha S., Dr. Vidyaathulasiraman, "Comparative Analysis of Pre-Trained Classifier in Augmented Approach for Ovarian Image", Turkish Journal of Computer and Mathematics Education, ISSN: 2308-2325, Vol.:12, Issue 9, 2021.
- 26. Kavitha S., Dr. Vidyaathulasiraman, "Ovarian Cancer Diagnosis using pretrained mask CNN-based segmentation with VGG-19 Architecture", Bio-Algorithm and Med-systems, ISSN: 1896-530X, Published online(https://doi.org/10.1515/bams-2021-0098), 2021.
- 27. Dr. S. Kavitha, "Effective Data Mining with Smart City Scheduling using Recurrent Encoder Neural Network", Intelligent Systems and Applications in Engineering, ISSN: 2147-6799, Vol.:12, Issue 3, 2024.
- 28. Enhanced Cryptographic Performance and Security using Optimized Edward-elgammal signature scheme for IoT and blockchain applications", International Journal on Smart Sensing and Intelligent Systems(open access), ISSN: 1855-0452 Vol.: 17 Issue:1, 2024
- 29. Enhancing User Experience in Human-Computer Interaction Through Advanced Deep Learning Techniques for Personalized and Adaptive Interfaces, IEEE Xplore, ISBN:979-8-3315-3994-8,2024.
- 30. Automated Skill Assessment using Convolutional Neural Networks: A Framework for Training Program, IEEE Xplore,

Paper Presentation & Publications in Proceedings

- 1. Empirical Study on Data mining for Water Quality, Govt. Arts and Science College, Bargur National –February 23, 2018-proceedings.
- 2. Empirical Study on data mining Techniques of prediction of Gynecologic Cancer, Adhiparasakthi College of Arts and Science, Kalavi National, August 29, 2018 Proceedings.

- 3. Risk Prediction System using Data Mining Techniques in Gynecological Ovarian Cancer, Sri Ganesh School of Business Management, Salem International, February 22, 2019- Proceedings.
- 4. Classification Using MLP Method for Detection of Ovarian Cancer Using Data Mining Techniques, Priyadrashini Engineering College, Vaniyambadi National March 15 & 16, 2019-Proceedings.
- 5. Early Detection of Ovarian Cancer Using MLP Classification Technique in Data Mining, Periyar University, Salem UGC-SAP National, March 21 & 22, 2019-Proceedings.
- 6. Neurological Diagnostic Optimization Using Cuckoo Search, Theivanai Ammal College for Women (Autonomous), Villupuram, National -September 18, 2019-Proceedings.
- 7. Ensemble Features Learning to Identify Risk Factor for Predicting Ovarian Cancer, Islamiah Women's Arts and Science College, Vaniyambadi, February 29, 2019-International- Proceedings.
- 8. AI Integration in Higher Education: Opportunities and Implications for Students, Auxilium college and Holy Cross College and jointly associating with Xavier Board of Higher Education in India, International Conference, November 21 2024 -Proceedings.
- 9. Enhancing User Experience in Human-Computer Interaction Through Advanced Deep Learning Techniques for Personalized and Adaptive Interfaces, IEEE International Conference on Intelligent Systems and Advanced Applications(ICISAA) (hybrid mode), Department of Electrical Engineering of Instrumentation Engineering, Pune, 25 and 26 October, 2024- Published
- 10. Human Stress Level using Hybrid Cascaded Neuro Fuzzy Classification of EEG Signals, Sree Abiraami Arts and Science College, Gudiyatham, National Conference, January 10 2025- Proceedings.
- 11. Automated Skill Assessment using Convolutional Neural Networks: A Framework for Training Program, 16th International IEEE Conference on Computing, Communication and Networking Technologies (ICCCNT) in Association with AICTE, Madhya Pradesh, 6th to 11th July, 2025.
- 12. Al-Based Prediction Model for Soil Moisture and Heat Levels in Agricultural Systems, International conference on utilizing AI: Prospects for women, Puducherry Arts and Research Academy(Para) in collaboration with RAAK Arts and Science College, Chidambaram ,16 March 2025.

Participated FDP's/ Seminars/ Workshops/Webinars

1. A one day Workshop, on "MATLAB" conducted by Auxilium College at Vellore. - State – on 22nd August 2015.

- 2. A one day Conference on "Recent Trends in Communication Technology" conducted by Auxilium College at Vellore. National –September 22nd 2015.
- 3. A one day Workshop, on "Enhancing Quality in Higher Educational Institution through Innovations and Best Practices", conducted by Auxilium College at Vellore. State 6th April 2016.
- 4. Three day Conference, on "Journey Towards Excellence", conducted by Auxilium College at Vellore. National 9th to 11th February 2017.
- 5. A one day Workshop, on "Software Testing Tools-Selenium", conducted by Auxilium College at Vellore. State 16th February 2017.
- 6. A one day Seminar on "Current Innovations in computer Technology", conducted by Auxilium College at Vellore National 13th December 2017.
- 7. A one day Seminar on "Capacity Building Programme on International Opportunities for Academicians and Young Professionals" conducted by Auxilium College at Vellore International 2018.
- 8. A one day Workshop, on "NEXTGEN" Technologies Data Science and Machine Learning with Python" conducted by Government Arts college for men, Nadanam, Chennai UGC Sponsored International 21st August 2019.
- 9. A one day FDP on "Artificial Intelligence and Computer Vision using MATALB", conducted by Auxilium College at Vellore National –26th September 2019.
- 10. A one day Workshop, on "Big Data Analytics", conducted by Auxilium College at Vellore -State- 24th October 2019.
- 11. Two days Conference on "Computing Paradigms" conducted by Don Bosco College Yelagiri Hills, Vellore District.-International August 30th & 31st 2019.
- 12. A one day Workshop, on "Android Mobile Application Development" conducted by Auxilium College at Vellore State 25th February 2019.
- 13. A one day FDP on "Machine Learning", conducted by Auxilium College at Vellore State 29th February 2020.
- 14. Eight Days FDP on "R Language", conducted by Auxilium College at Vellore National from 13^{th to 20th} May 2020.
- 15. A one day Webinar on "Study of Cryptography" conducted by Sri Venkateswara College of Engineering, State 14 May 2020.
- 16. A one day Webinar on "Obstacles and Guidelines for Publishing Papers in Journal" conducted by Periyar University Constituent College of Arts and Science Pappireddipatti, Dharmapuri.- National 23rd May 2020.
- 17. Two day conference on "Quality in Teaching, Learning and Evaluation : A Need for Academic Excellence" conducted by St. Aloysius College, Jabalpur Madesh Pradesh, National- from 29th to 30th May 2020.

- 18. Five days FDP on "Evolution from offline to online teaching" conducted by Satish Pradhan Dnyanasadhana college, thane & IQAC in Association with Dept. of IT university of Mumbai Yashwantrao chavan Maharashtra open university, mumbai and Microsoft National from 30th May to 3rd June 2020.
- 19. A one day Webinar on "Machine Learning and Data Science" conducted by K.M.G. College of Arts and Science, Gudiyattam, Vellore, National 23th July 2020.
- 20. A one day Webinar on "Blockchain Technologies" conducted by Thiruvalluvar University College of Arts and Science, Tirupattur State 27th July 2020.
- 21. Two days Webinar on "Information Technology Essentials" conducted by Auxilium College, Vellore –International 29th May to 30th May 2020.
- 22. Three days FDP on "Online Faculty Development Programme on Learning Management System(MOODLE)" conducted by Sacred Heart College, Tirupattur State from 6th June to 05 June 2020.
- 23. A one day FDP on "Introduction to Cloud Technology" conducted by Government Arts & Science College, Barugur, State 10th June 2020.
- 24. Seven days FDP on "Evolving Best Teaching and Learning Practices in the Pandemic Era 2020" conducted by Auxilium College, Vellore International from 15th june to 21st june 2020.
- 25. A one-day Webinar on "Augmented Reality: A Perspective View", conducted by St. Jospeh's College of Arts & Science, Cuddalore State 07th August 2020.
- 26. A one-day Webinar on "One Day Training Cum Orientation Programme" conducted by Bharathiar University with TANSCHE, Coimbatore State 30th September 2020.
- 27. Ten days Webinar on "DST-PURSE sponsored webinar series on Advanced Computing" conducted by Bharathiar University, Coimbatore, State 02nd November to 11th November 2020.
- 28. A one-day Seminar on "Recent Trends in AI, Data Science and its Application", conducted by ICT Academy and Auxilium college State 24th February 2021.
- 29. Five days FDP on "Fundamentals of AI (online Live FDP)" conducted by ICT Academy National from 19th July to 23rd July 2021.
- 30. Two days FDP on "Recent Research Innovation in Computer Science & Technology", conducted by Marudhar Kesari Jain College, Vaniyambadi State from 27th to 28th August 2021.
- 31. A one-day webinar on "Emerginig Trends in User Interface Design", conducted by Dr. Ambedkar Government Arts College, Vyasarpadi, Chennai National 29th August 2021.

- 32. 30-day workshop on "DataScience 2.0 Master Class" organized by Pantech e-learning Pvt. Ltd., Chennai National from 20th September to 21st October 2022.
- 33. One-day workshop on "Indexed Publication A Driven Force for Academic Progess" organized by SRM Institute of Science and Technology, Ramapuram Campus, College of Science and Humanities 26th August 2023.
- 34. 30-day workshop on "Java FullStack 2.0 Masterclass" organized by Pantech e-learning Pvt. Ltd., Chennai National from 10th December to 10th January 2023.
- 35. 2 weeks Course completed on "AICTE Evaluated 2 weeks Patent Course" by Turnip Innovations from 28th November to 11 December 2023.
- 36. A one day International Conference on "Youth for Earth: Restore and Protect Our Environment" by Enviro Club of Auxilium College in collaboration with Tamil Nadu Pollution Control Board, Vellore on 10th October 2024.
- 37. A one-day International Conference on "Innovative Trends in Information and Communication Technology" by Department of Computer Science and Applications and Communication Media, Auxilium College, Vellore on 21st November 2024.
- 38. A one-day National Workshop on "Full Stack Web Development" by Department of Computer Science and Applications, Auxilium College on 23rd September 2024.
- 39. Avanthi Institute of Engineering & Technology (Autonomous), Anakapalle Dt., organized One Week Faculty Development Program on "Next Generation IoT: The Convergence of Designing Robust and Scalable Applications" from 02nd to 07th December 2024.
- 40. A Five-Day National Level online FDP on "Beyond Boundaries: Driving Innovation in Research "from 26th to 30th December 2024 organized by Research Ethics, Publication & IPR, Auxilium College(Autonomous) in collaboration with North East Institute of Social Science & Research, Nagaland.
- 41. E & ICT Academy organized one week (40 hours) Faculty Development Program on "Salesforce Platform Developer" hosted by Auxilium College, Vellore from 24th to 28th February 2025.
- 42. Mary Matha College of Arts and Science, Theni Dt., & Fuzzy Byte Association organized One Week Faculty Development Program on "Futuristic Pathways in Technology & Computational Methodologies" from 6th to 11th January 2025.
- 43. A one-day National Webinar on "AI for Startups" by Turnip Innovations Pvt. Ltd., Kolkata on 4th August 2025.
- 44. A one-dat International conference on "utilizing AI: Prospects for women, Puducherry Arts and Research Academy(Para) in collaboration with RAAK Arts and Science College", Chidambaram ,16 March 2025.

Online Course

AICTE Evaluated 2-week patent course organized by Turnip Innovations from 28 November to 11th December 2023.

Program Organized

- 1. Organized one day State Level Seminar on "Security in Information Technology", on 7th September 2011.
- 2. Organized State Level Intercollegiate Competition "i-fest 2012", on 12th September 2012.
- 3. Organized State Level Intercollegiate Competition "i-fest 2014", on 19th September 2014.
- 4. Organized one day National conference on "Recent Trends in Communication Technology" NCRTCE'15, on 22nd September 2015.
- 5. Organized one day State Level Workshop on "MATLAB", on 22nd August 2015.
- 6. Organized One day State Level Intercollegiate ifest-2016, on September 2016.
- 7. Organized Two Day International Webinar on "Information Technology Essentials", on 29th & 30th May 2020.
- 8. 30 days Course Co-Ordinator, Pantech e-learning Masterclass on "Machine Learning" from 1st September to 30th September 2023.
- 9. 21 days Course Co-Ordinator, Pantech e-learning Masterclass on "Amazon Web Services" from 11th October to 31st October 2023.
- 10. 21 days Course Co-Ordinator, Pantech e-learning Masterclass on "Python Programming" from 25th October to 14th November 2023.
- 11. 21 days Course Co-Ordinator, Pantech e-learning Masterclass on "Data Science" from 08th November to 02nd December 2023.
- 12. 30 days Course Co-Ordinator, Pantech e-learning Masterclass on "Internet of Things" from 25th December to 24th January 2024.
- 13. Organized A Five-Day National Level online FDP on "Beyond Boundaries: Driving Innovation in Research "from 26th to 30th December 2024 organized by Research Ethics, Publication & IPR, Auxilium College(Autonomous) in collaboration with North East Institute of Social Science & Research, Nagaland.