

1. Name: Dr. S.Lavanya
2. Designation: Assistant Professor and Head, Department of BCA (Shift II)
3. Qualification: B.Sc, M.Sc., M.Phil., SET, Ph.D
4. Mobile number: 9894347977, 8825774696
5. E-mail id: lavanyas@auxiliumcollege.edu.in
6. Teaching Experience: 19 years
7. Area of specialization: IOT, Sensor Networks
8. Positions held: Additional Chief Examiner 2010-2011
Placement Coordinator 2011-2021
Calendar Committee 2017-18 and 2023-2024
Head of the Department 2014 – till date
Member of Research Cell 2021 till date
9. Research Experience and Guidance: Guided M.Phil students for 10 years – 40
10. Projects Completed / Ongoing: Seed money project(2023 – 2025)
11. No. of Papers Published:19
12. No. of Papers Presented in the National/ International/ Seminars/
Workshops/ Conferences :4
13. No. of Seminars/Workshops/Conferences organized: 58
14. No. of Books Published/Edited/Co-edited: NIL
15. Current Responsibilities: Head, Department of Computer Applications (Shift II) since
2014 till date.
Member, Research and Incubation Cell
16. Membership in professional bodies (Descriptive): Lifetime Member, Computer Society
of India

Member, National Science Foundation

Paper Publications:

1. Lavanya S. and Prakasam S. 'Reliable Techniques for Data Transfer in Wireless Sensor Networks', International Journal of Engineering and Computer Science, ISSN: 2319 – 7242, 2014, Vol. 3, Issue 12, pp. 9726 – 9731.
2. Lavanya S. and Prakasam S. 'Remote Monitoring of Nuclear Power Plants with the Integration of IOT and Cloud Computing', International Journal of Advance Research in Science and Engineering, 2015, Vol. 4, Special Issue (01), pp. 106- 110.
3. Lavanya S. and Prakasam S. 'Performance Analysis of Three Hop Reliability Model for Wireless Sensor Network in Nuclear Power Plants', IOSR Journal of Computer Engineering (IOSR – JCE), e-ISSN: 2278-0661, p-ISSN: 2278-8727, 2015, Vol. 17, Issue 4, pp. 29-35.
4. Lavanya S. and Rekha , 'Reliability Analysis of Three Hop Model for Wireless Sensor Networks', International Journal of Computer Science and Information Technology Research, 2015, ISSN 2348- 120X: 2348-1196.
5. Lavanya S. 'Hybrid Data Aggregation Techniques in Wireless Sensor Networks, International Journal of Engineering and Technology' , e-ISSN: 2395- 0056, 2015.
6. Lavanya S. and Prakasam S , 'Remote Monitoring of Nuclear Power Plants with the Integration of IOT and Cloud Computing', International Journal of Advance Research in Science and Engineering, 2015, Vol. 4, Special Issue (01), pp. 106-110.
7. Lavanya S., 'Cross Layer Data Collection in Wireless Sensor Networks', International Journal of Engineering and Technology, 2015, e-ISSN: 2395- 0056, 2015.
8. Lavanya S. 'Performance Evaluation of Energy Efficient MAC Protocols for Wireless Sensor Networks', International Journal of Computer Science and Information Technology Research, ISSN 2348-120X(Online); 2348-1196(Print), 2015.
9. Lavanya S., 'Performance Analysis of Hybrid Mechanism to Improve Reliability in Wireless Sensor Networks', International Journal of Computer Techniques, ISSN: 2394-2231, 2016.
10. Lavanya S., 'Comparative Study of Scheduled and Unscheduled MAC Protocols in WSN, "International Journal of Engineering and Technology", e-ISSN: 2395- 0056, 2016.
11. Lavanya S., "Comparative Study on Wireless Sensor Network Integrated with Cloud Computing using Middleware Services", International Journal of Computer Techniques, e-ISSN: 2395- 0056, 2016.

12. Lavanya S.,” Geographic- Aware Energy Efficient Forwarding Node Selection for Throughput Improvement in Wireless Sensor Network”, ISSN 2348-120X; 2348-1196. 2016.
13. Lavanya S. and Prakasam S. ‘Performance Analysis of Energy Efficient Dynamic Multilayer Cluster Designing Routing Protocol in Wireless Sensor Network’, Indian Journal of Science and Technology, ISSN: 0974 – 5645,2016, DOI: 10.17485, Vol. 9(48), pp. 01- 07.
14. Lavanya S., “Enhancing Performance for Orthogonal Frequency Division Multiplexing in Wireless System”, ISSN: 2395-0056, 2017.
15. Lavanya S. Improving Energy-Efficiency in Wireless Body Area Network for M-Gear using Multihop Link Efficient Protocol (MLEP), International Journal of Computer Techniques, ISSN: 2394-2231,2017.
16. Lavanya S. and Prakasam S. ‘Reliable Communication of Hybrid Data in Wireless Sensor Networks using Priority Queues’, International Journal of Information Technology, ISSN 2321-5976, Vol. 6, Issue 8, August 2018. (UGC APPROVED JOURNAL)
17. Lavanya S. and Prakasam S. ‘Energy Efficient and Reliable MAC Protocol for Intra-cluster Communication in Application Specific Wireless Sensor Networks’, International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 13, Number 1 pp. 471- 475, 2018. (UGC APPROVED JOURNAL)
18. Anbu Selvi Remitta and Lavanya S., (2018), “Seamless Access of Smart Healthcare Services in Virtual Machine Resource Migration using Honey bee optimization Algorithm with Cloudlet.
19. Lavanya S. (2020), “Video On-Demand Transcoding In Amazon Web Service Using Heterogeneous Cloud Services”, International Journal of Creative Research Thoughts, 2320-2882, Volume 8 Issue 10.

International Conferences:

1. Performance analysis of Cluster Formation Schemes for Energy Conservation in Wireless Sensor Networks - IEEE International Conference on Algorithms, Methodology, Models and Applications in Emerging Technologies (ICAMMAET) , Bharath Institute of Higher Education and Research, February 16-18 (IEEE Xplore December 27 2017).
2. Performance Analysis of Multilevel Clustering Protocol with Energy Efficiency and Reliability (MCPR)’, 6th IEEE International Conference on Communication and Signal Processing, Adiparasakthi Engineering College, April 6-8 (IEEE Xplore

February 8 2018).

3. MAC Protocols for Reduced Power Consumption in Intra- Cluster Design for Wireless Sensor Networks', IEEE International Conference on Innovations in Power and Advanced Computing Technologies (i-PACT 2017), VIT University, April 21-22 (IEEE Xplore January 4 2018).
4. Comparative Analysis of Energy-Efficient and Improved QoS-Driven Task and Resource Scheduling in Mobile Cloud Computing Environment', International Conference on Recent Trends in Computing, Communication and Networking Technologies (ICRTCCNT'19), Kings Engineering College, October 18-19, 2019, Chennai, Tamilnadu, India. Proceedings of International Conference on Recent Trends in Computing, Communication & Networking Technologies (ICRTCCNT) 2019.

Conferences/Symposia/Seminar/Workshop/Faculty Development Program Participation Details

1. National Seminar Hubvision conducted by Theivanai Ammal College for Women, Villupuram conducted on 20.10.2005 & 21.10.2005.
2. National Seminar on Innovative Strategies for Internal Quality Assessment organized by Auxilium College, Vellore on 24.11.2006 & 25.11.2006.
3. National Workshop on Software Design and Testing organized by Auxilium College, Vellore on 7.12.2007 & 8.12.2007.
4. National Conference on Recent Trends in Communication organized by Auxilium College, Vellore on 25.09.2009.
5. State-Level Seminar on Security in Information Technology organized by Auxilium College, Vellore on 07.09.2011.
6. National Workshop, "Hands on Training on Wireless Sensor Networks using COOJA Simulator", organized by Karpagam College of Engineering, held on 06.02.2015.
7. Two days International Conference, " E-Governance and Cloud Computing Services", organized by Dr.M.G.R University on 23.07.2015 & 24.07.2015.
8. National Workshop on Scope and Opportunities in IBM Mainframe Computing Focus on Big Data Analytics and Cloud Computing organized by VIT University, Vellore on 25.07.2015.
9. State-Level Workshop on MATLAB organized by Auxilium College, Vellore on 22.08.2015.
10. National Conference on Recent Trends in Communication Technology organized by Department of Computer Applications, Auxilium College, Vellore on 22.09.2015.

11. State- Level Workshop on Enhancing Quality in Higher Educational Institution through Innovations and Best Practices held in Auxilium College, Vellore on 06.04.2016.
12. International Seminar on SMAC- Digital Technology organized by Marudhar Kesari Jain College for Women on 03.09. 2016.
13. National Conference on Journey towards Excellence organized by Auxilium College, Vellore on 09.02.2017 to 11.02.2017
14. State-Level Workshop on Software Testing Tool-Selenium organized by Auxilium College, Vellore on 16.09.2017.
15. International Workshop on Capacity Building Programme on International Opportunities for Academician s and Young Professionals organized by Auxilium College, Vellore on 08.12.2017.
16. National Seminar on Current Innovations in Computer Technology organized by Computer Applications, Auxilium College, Vellore on 13.12.2017.
17. National Workshop on Mobile Application Development using Android organized by Auxilium College, Vellore on 11.08.2018
18. National Level Faculty Development Program on Skill Enhancement Program for Academicians and Researchers in Computer Science by Sacred Heart College on 24.08.2018 & 25.08.2018.
19. National Conference on Design Challenges in Machine Intelligence organized by Auxilium College, Vellore on 01.09.2018
20. 3 Day National Colloquium on Higher Education: The Past and Future organized by Christ University, Bangalore from 28.11.2018 to 30.11.2018
21. National Conference on Recent Innovations in Engineering, Technology, Management and Applications organized by Priyadarshini Engineering College, Vaniyambadi on 15.03.2019 & 16.03.2019
22. State Level Workshop on Intellectual Property Rights organized by Auxilium College, Vellore on 2.08.2019 & 3.08.2019
23. International Workshop on Recent trends on Computer Science and Information Technology organized by Thiruvalluvar University, Serkkadu, Vellore on 22.08.19
24. International Conference on International Conference on Computer Paradigms organized by Don Bosco College (Co- Ed), Yelagiri Hills & Integrated Intelligent Research Chennai organized on 30.08.19 & 31.08.19.
25. National Faculty Development Programme on Artificial Intelligence and Computer Vision using MATLAB and SIMULINK organized by Auxilium College, Vellore

on 26.09.19.

26. National Workshop on Data Processing and Automation for NIRF organized by Don Bosco College, Yelagiri Hills on 08.11.2019.
27. National Faculty Development Programme on Machine Learning organized by Auxilium College, Vellore on 29.02.2020
28. Five Day Faculty Development Programme “Fundamentals of Kotlin”, conducted by ICT Academy on 09.11.2020 to 13.11.2020.
29. One Week Faculty Development Programme on R” in association with Spoken Tutorial, IIT Bombay (An Initiative of National Mission on Education through ICT, MHRD, Govt. of India) during 21st to 27th May 2020.
30. Faculty Development Programme in Drupal (Open Source Content Management System) organized by the Department of Computer Science in association with Spoken Tutorial Project, IIT Bombay from 11-05-2020 to 15-05-2020.
31. Five day FDP titled Teaching using ICT Tools”, organized by JP College of Arts and Science.
32. Three day Workshop on Video Content Creation organized by Mariam College, Kuttikanam, from 15 to 17th April 2020.
33. International Digital Conclave on 'Innovations in Teaching-Learning, a Global Perspective' held on 14th, 15th and 16th July 2020 by Marian College Kuttikkanam and Amal Jyothi College of Engineering.
34. International Faculty Development Programme (online) of one week, four hours per day on Evolving Best Teaching and Learning Practices in the Pandemic Era 2020. 15th - 21st June 2020 Organized by the Board of Management Auxilium College (Autonomous) Vellore
35. Webinar on Machine Learning Techniques for detection and classification" organized by the Department of Electronics and Computer Engineering, K L University held on 25th April 2020.
36. Five day Faculty Development Programme “Introduction to Python Programming”, conducted by ICT Academy on 26.04.2021 to 30.04.2021.
37. Faculty Development Program on Introduction to Data Science using Covid-19 DataSet (Hands-on Session) organized by Codegnan IT Solutions in association with Guntur Engineering College, Guntur 18-05-2020 to 22-05-2020
38. National Level FDP on Tools for Online Classroom Post Covid-19 organized by P.B.Siddhartha college of arts and science, Vijayawada and Computer Society of India (CSI), Vijayawada Chapter from 18-05-2020 to 20-05-2020
39. National Level FDP on Teaching Using ICT Tools organized by Department of BCA, IT,

40. JP College Of Arts and Science, Agarkattu, Tenkasi from 20.05.2020 to 24.05.2020
41. Webinar on VUCA world organized by Sky Campus, ICT Academy from 20th – 21st April 2020
42. Webinar on Building Neural Networks in a Simple Way by Codegnan IT Solutions organized on 21st April 2020
43. Webinar on Online Workshop on Communicate with Confidence by VB Academy on 24th April 2020
44. Webinar on Examination reforms to complement OBE by KL University, Guntur, AP on 24th April 2020
45. Webinar on AI & ML – Challenges, Opportunities and Emerging Applications" by KL University, Guntur, AP on 25th April 2020
46. Artificial Intelligence and Machine Learning Challenges, Opportunities and Emerging Applications by KL University, Guntur, AP by 30th April 2020
47. One day workshop on Basic Introduction to Moodle organized by Marian College Kuttikanam(Autonomous) ,Kerala organized by 4th May 2020
48. "Study of Cryptography, Network Security and Implementation of Algorithms in Hardware for Lightweight Applications" by Department of Electronics and Communication Engineering of Sri Venkateswara College of Engineering, Pennalur, Sriperumbudur. On 14th May 2020
49. Webinar on Django Python Framework by Sigmora Institute, Vadodora on 14th May 2020
50. Webinar on Usage Of Ict Tools - Why? How? By Ethiraj College for Women, Chennai, in association with Oneyes Technologies on 14th May 2020
51. Webinar on Impact Factor, H index and Google Scholar by Department of Commerce, Ethiraj College For Women on 16th May 2020
52. Webinar on Applied Research in Multidisciplinary Research organized by Sona College, Salem on 18-19th May 2020
53. Webinar on Computing Paradigms organized by Yelagiri Hills ACM Chapter and Don Bosco College Yelagiri Hills from 21-22 May 2020
54. Webinar on Development of Educational Videos" by SCEED, Stella Maris College (Autonomous), Chennai from 25th May 2020
55. Webinar on Image Analytics & Processing organized by V.O.Chidambaram College, Thoothukudi on 25th May 2020

56. Two-Week Online Faculty Development Programme" and Training on "LibreOffice suite Writer, Calc & Impress" organized by The Board of Management, Auxilium College (Autonomous), Vellore in association with Spoken Tutorial, IIT Bombay (funded by the NMEICT, MoE, Govt. of India) from 26.05.2022 to 10.06.2022.
57. National Webinar on "Publish and Progress" organized by IQAC committee for Research, Ethics and Publications, Auxilium College (Vellore) on 26.08.2023
58. Eight Days National level Online Faculty Development Program on Research Methodology using ChatGPT and AI tools by Marian College Kuttikanam (Autonomous) in association with The Kerala State Higher Education Council from 21 to 29, September 2023.

Programmes Organized:

1. National Conference on Recent Trends in Communication Technology organized by Department of Computer Applications, Auxilium College, Vellore on 22.09.2015.
2. One day State Level Workshop on "Software Testing Tool-Selenium" on 16th September 2017 addressed by Dr. A. Akbar khan Software Automation Test Engineer, IMS Health Care, Vellore.
3. A Workshop on "Mobile Application Development using Android" on 1st August 2018 addressed by Mr.MK Prabhu, Software Developer, Pantech solution, Chennai.
4. A National Level Faculty Development Program on "Machine Learning" on 29th February 2020 addressed by Dr. Vijayarajan V, Associate Professor, VIT University, Vellore and Ms. Reena M Assistant Professor, Department of Computer Science, St. Philomena's Degree College (Autonomous), Mysore.
5. A Three-Day Online Faculty Development Program on "Enhancing Professional Skills in Information Technology" from 6 to 8th May 2020 addressed by Ms. A. R. Charulatha, Assistant Professor, Stella Maris College, Chennai, Mr. Surya Prakash, Technology Associate-HPC, Locus Enterprise Solutions, Bangalore and Mr. K. R. Arun, Assistant Professor, VIT University, Vellore.
6. One week National level FDP on "Machine Learning" sessions from 01-06-2020 to 07-06-2020 addressed by Dr. Sujatha, Associate Professor, VIT University, Vellore, Ms. Reena Mol V.U., St.Philomena's College, Mysore, Dr. P Selvi Rajendran, Professor, Dept. of CSE, Hindusthan Institute of Technology and Science, Chennai ,Dr. P.S. Sreeja, Assistant Professor, School of Computing Sciences, Hindusthan Institute of Technology and Science, Chennai Ms. Niharika Krishnan, Ms. Sukanya Mandal , Data Scientist, ,Mumbai
7. A Webinar on "R Programming" on 3th October 2020 addressed by Ms.Niranjana Devi. R, Process Lead and Subject Matter Expert in Bytech India Pvt Ltd, Bangalore.

8. A Webinar on " Internet of Things" on 10th October 2020 addressed by Dr M Sasikala MCA, M Phil., SET, NET., PhD., Assistant Professor, Department of Computer Science, MGR College, Hosur.
9. National Webinar on "E-Waste and Green Computing" on 24th November 2020 addressed by Ms Muthulakshmi A, Assistant Professor, Department of Computer Science, Sacred Hearts College, Bangalore.
10. National Level Webinar held on "AIOPS and Advanced Cloud Computing" on 13th February 2021 addressed by Mr. Ajithkumar V, Developing Engineer, Blue Jess Company, Bangalore.
11. Seminar on "Job Opportunity and Placement" on 25th August 2022, addressed by Dr.K.UMA Assistant Professor (Senior) School of Information Technology and Engineering (SITE), VIT University, Vellore.
12. State Level Inter-Collegiate Competition IFEST-2022 on "Block chain Technology" on 30th September 2022 addressed by Ms. A.R.Charulatha, M.Sc.,M.Phil., Assistant Professor, Department of Computer Science, Stella Mary's College, Chennai.
13. Seminar on "Towards the Internet of Things", 1st October 2022 addressed by Dr J Vinog Assistant Professor, Nehru Arts & Science College , Coimbatore.
14. Seminar on "Voice Recognition" on 4th February 2023 addressed by Dr. K. Karthika M.C.A.. M.Phil., Ph.D., Assistant Professor, Karpagam Academy of Higher Education, Coimbatore.
15. Seminar on "Data Science, Machine Learning and Deep learning" on 3rd August 2023 addressed by Ms.Rajalakshmi S., Data Scientist, Strydo Technologies, Vellore.
16. International conference on " Information and Communication Technology- ICICT'23" on 14 and 15th September 2023 addressed by Dr. D.Doreen Robin, Director, Computational Intelligence Research Foundation, Chennai 23, Mr.Raman R.K, Asst Professor, Department of Computer Science and Cloud Computing, Loyala Academy, Mr.Sam Theophilus Senior Programmer, Department of Computerized Hospital Information, CMCH, Mr.Arockia Doss A, Technical Lead, Tata Consultancy Service, Prof .Ravi Samikannu, Associate Professor, Department of Electrical Computer and Telecommunication Engineering, Botswana International University of Science and Technology, Palapye, Botswana, South Africa, Dr.Supriya, Associate Professor and Vice Chairperson, School of Computing, Bengaluru. Dr.S.Senthil Kumar, Asst Professor, Department of Computer Applications, Faculty of Science and Humanities, SRMIST, Tiruchirapalli, Dr.S.Margret Anuncia, Director-Faculty and Staff Welfare, VIT, Vellore.

Resource Person:

Workshop on “AI Tools for Educators” on 29th September 2023 organised by Department of Computer Science and Applications Auxilium College, Vellore.