STAFF PROFILE

1. Name: Dr. S.Lavanya

2. Designation: Assistant Professor, Department of BCA (Shift II)

3. Qualification: B.Sc, M.Sc., M.Phil., SET, Ph.D

4. Mobilenumber: 9894347977, 8825774696

5. E-mailid: lavanyas@auxiliumcollege.edu.in

6. TeachingExperience: 21 years

7. Areaofspecialization: IOT, Sensor Networks

8. Positionsheld: HOD: 2014-2023

Additional Chief Examiner 2010-2011 Association and Quiz club: 2005 to 2007 In-charge of Department Library: 2011 - 2015

Placement Coordinator 2011-2021

Calendar Committee 2017-18 and 2023-2024

Member, Research and Incubation Cell: 2022-2024

9. ResearchExperienceandGuidance: Guided M.Phil students for 10 years – 24

10. Projects Completed/Ongoing: Seed money project(2023 – 2025)

11. No. of Papers Published: 25

12. No. of Papers Presented in the National/International/Seminars/Workshops/

Conferences :5

13. No.ofSeminars/Workshops/Conferencesorganized: 21

14. No.ofBooksPublished/Edited/Co-edited: 1 + 1 Patent

15. CurrentResponsibilities: Placement Co-ordinator

16. Membershipinprofessionalbodies(Descriptive): Lifetime Member, Computer Society of India Member, National Science Foundation

Paper Publications:

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.

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.

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.

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.

Lavanya S. 'Hybrid Data Aggregation Techniques in Wireless Sensor Networks, International Journal of Engineering and Technology', e-ISSN: 2395-0056, 2015.

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, SpecialIssue (01), pp. 106-110.

Lavanya S., 'Cross Layer Data Collection in Wireless Sensor Networks', International Journal of Engineering and Technology, 2015, e-ISSN: 2395-0056, 2015.

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.

Lavanya S., 'Performance Analysis of Hybrid Mechanism to Improve Reliability in Wireless Sensor Networks', International Journal of Computer Techniques, ISSN: 2394-2231, 2016.

Lavanya S., 'Comparative Study of Scheduled and Unscheduled MAC Protocols in WSN, "International Journal of Engineering and Technology",e-ISSN: 2395-0056, 2016.

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.

Lavanya S.," Geographic- Aware Energy Efficient Forwarding Node Selection for Throughput Improvement in Wireless Sensor Network", ISSN 2348-120X; 2348-1196. 2016.

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.

Lavanya S., "Enhancing Performance for Orthogonal Frequency Division Multiplexing in Wireless System", ISSN: 2395-0056, 2017.

Lavanya S.Improving Energy-Effiency in Wireless Body Area Network for M-Gear using Multihop Link Efficient Protocol (MLEP), International Journal of Computer Techniques, ISSN: 2394-2231,2017.

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)

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)

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.

LavanyaS. (2020), "Video On-Demand Transcoding InAmazon Web Service Using Heterogeneous Cloud Services", International Journal of Creative Research Thoughts, 2320-2882, Volume 8 Issue 10.

Lavanya(2023), "Forest Fire Monitoring System", "International Journal of Innovative Research in Science, Engineering and Technology", Volume 12, Issue 4, April 2023.

Lavanya(2024), "Green IOT Solutions for Intelligent Farming In Ranipet District", Volume 12, Issue 3, March 2024, ISSN 2320-2882.

Lavanya (2024), "Comparative Analysis of Secure Block chain based IOT Cloud Electronic Medical Records Sharing", "International Research Journal of Modernization in Engineering Technology and Science", Volume 06, Issue 09, September 2024.

Lavanya(2025), "Crop Recommendation using Explainable AI Algorithm", International Journal of Research Publication and Reviews, Vol(6), Issue(3), March, Pages 1707-1708, ISSN 2582-7421

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

National Workshop, "Hands on Training on Wireless Sensor Networks using COOJA Simulator", organized by Karpagam Collegeof Engineering, held on 06.02.2015.

Two days InternationalConference, "E-Governance and Cloud Computing Services", organized by Dr.M.G.RUniversity on 23.07.2015& 24.07.2015.

Five day FDP "Fundamentals of Kotlin", conducted by ICT Academy on 09.11.2020 to 13.11.2020.

Five day FDP "Introduction to Python Programming", conducted by ICT Academy on 26.04.2021 to 30.04.2021.

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.

Faculty Development Programme in Drupal (Open Source Content Management System) organised by the Department of Computer Science in association with Spoken Tutorial Project, IIT Bombay from 11-05-2020 to 15-05-2020.

Five day FDP titled Teacning using ICT Tools", organized by JP college of Arts and Science.

Three day Workshop on Video Content Creation organized by Mariam College, Kuttikanam, from 15 to 17th April 2020.

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.

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

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.