


**SRI SAI RAM ENGINEERING COLLEGE,CHENNAI-44**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Name & Photo : V.LALITHA	
Designation:	ASSOCIATE PROFESSOR
Qualification :	M.E(CSE) (PhD)
Area of Specialization :	MACHINE LEARNING, DEEP LEARNING, IMAGE PROCESSING,COMPILER DESIGN, THEORYOF COMPUTATION
Experience :	Teaching : UG: 22 YEARS PG : 6 YEARS
	Industry : NIL
No. of workshop / FDP attended :	WorkShop:06 FDP :27
Publication :	Journal National : NIL International : 18
	Conference National : 07 International : 13
Research Guidance :	NIL
Patent:	1.GUARDIAN PI: SMART WATCH NIGHT SURVEILLANCE,IPR NO: 202441075613 PUBLISHED ON :18/10/2024 2. AN IOT BASED CROP SUGGESTER APPLICATION USING THE NUTRIENT CONTENT OF THE SOIL, IPR NO: 202341071340A, PUBLISHED ON :19.10.2023 3. IoT-driven Artificial Intelligence-Based Actual Structure-Health Monitoring and Damage Testing, IPR NO:202341034151 PUBLISHED ON: 15/05/2023 4. CLASSIFICATION OF ATRIAL -FIBRILLATION DISEASE USING

	<p>MACHINE LEARNING ALGORITHMS  IPR NO:202241064104  PUBLISHED ON:10.11.2022</p>
<p>General :</p>	<ul style="list-style-type: none"> <li>● Life Member, Indian Society for Technical Education</li> <li>● Life Member, International Association of Computer Science and Information Technology</li> <li>● Life Member, International Association of Engineers member</li> <li>● IEEE SENIOR MEMBER SINCE 2021</li> </ul>
<p>Staff Achievements:</p>	<p>Acting as Time Table coordinator  Acting as Seminar/Workshop coordinator  Acting as Industrial visit coordinator  Acting as NAAC Coordinator  Acting as Talent Enabler (TE)  Acting as Value Added course (RED HAT) coordinator  Completed NITTTR 8 MODULES</p>

## Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
PMR INSTITUTE OF TECHNOLOGY	LECTURER	MAY'2003	MAY'2007	4	0	0
SRI SAIRAM ENGINEERING COLLEGE	ASSOCIATE PROFESSOR	JUNE'2007	TILL DATE	18	10	0
<b>Total</b>				22	08	0

## Workshop/Webinar/FDP:

1. Attended SDP on AICTE sponsored Staff Development Programme on Telemedicine & e-health, conducted during 9<sup>th</sup> to 21<sup>st</sup> July 2007.
2. Attended Workshop on “Research Challenges in Soft Computing” at SRM University during 16<sup>th</sup> and 17<sup>th</sup> December 2011.
3. Attended 2 days workshop on “Robotics Championship “conducted by Sparklab in association with SHASTRA, IIT Madras for 2 days 02.01.14 & 03.01.14.
4. Attended FDP on “Software Testing” conducted by TCS, Siruseri on 14<sup>th</sup> November 2014.
5. Attended Knowledge ++ workshop on 27<sup>th</sup> and 28<sup>th</sup> February 2105 conducted by L&T InfoTech, DLF.
6. Attended FDP on “Grid and Cloud Computing “for 2 days 08.08.16 & 09.08.2016.
7. Attended 5 days Faculty Development Programme on “Data Science and Big Data Analytics” in association with DELL EMC & ICT ACADEMY from 11/09/2017 to 15/09/2017.
8. Attended workshop on “Red Hat Technology and Industry Adaptation” on 5<sup>th</sup> Dec 2017.
9. Attended FDP on “Engineering Teaching Pedagogy and Teaching Learning Process” from 03/12/2018 to 07/12/2018 conducted by Sri Sai Ram Institute of management Studies.
10. Attended FDP on “NextGen TechStack” from 08/04/19 to 12/04/2019 .
11. AICTE sponsored 2 weeks FDP on “Data Science and Exploratory Data Analysis with R and Python” from 07.06.2019 to 20.06.2019.
12. Attended workshop on “Intellectual Property Rights & Innovations” on 20/07/2019 conducted by Centre for Intellectual Property Rights (CIPR) Anna University. Dept of Research & Development
13. Attended AICTE FDP on “Ethical Hacking” during September 2019 through NPTEL.
14. Attended AICTE FDP on “Internet of Things” from 10.04.2020 to 14.04.2020 organized by NITTR, Chandigarh.
15. Attended AICTE FDP on “Artificial Intelligence” from 25.05.2020 to 29.05.2020 organized by NITTR, Chandigarh.
16. Attended ATAL FDP on “Computer Science and Biology” from 10.04.2020 to 14.04.2020 organized by NITTR, Chandigarh.
17. AICTE sponsored FDP on “Smart Perspectives of IoT on 5g Communication - Practical Approach” from 08.11.2019 to 21.11.2019 conducted by Panimalar Engineering College.
18. Attended MHRD - Leadership Talk with Ms. Ashwini Deshpande (Co-Founder & Director Elephant Design) on 06/06/2020.
19. Attended Webinar on R&D proposal writing for faculties on 12/06/2020 organized by SIMS.

20. Attended Webinar cum Workshop on “Data Science using Python “ from 17.06.2020 to 25.06.2020 conducted by Amrita College of Engineering & Technology, Nagarcoil.
21. Attended IETE FDP on “New Normal with Disruptive Technologies” from 27.07.2020 to 31.07.2020 Conducted by Dr.M.G.R. Educational and Research Institute
22. Attended FDP on “Data Science “from 24.08.2020 to 28.08.2020 conducted by Rajalakshmi Institute of Technology.
23. Attended ATAL FDP on “Data Science” from 21.09.2020 to 25.09.2020 conducted by B.S.Abdur Rahman Crescent Institute of Science & Technology.
24. Attended ATAL FDP on “Computer Science and Biology” from 01.10.2020 to 05.10.2020 conducted by Kalinga Institute of Industrial Technology, Bhubaneswar.
25. Attended AICTE STTP on Building Intelligent Applications with Deep Learning using PyTorch from 05.10.2020 to 10.10.2020 organized by Rajalakshmi Institute of Technology.
26. Attended RAISE 2020, Gov.in –webinar - Virtual Global Summit on AI, India from 05.10.2020 to 09.10.2020 organized by Ministry of Electronics & Information Technology, India
27. Attended webinar on ““IEEE Benefits to Research Community” on 23.10.2020 conducted by Srinivas University, Mangaluru.
28. Attended AICTE STTP on”Medical Image Analysis” from 02.11.2020 to 07.11.2020 organized by V.S.B. Engineering College, Karur
29. Attended AICTE STTP on”Cyber security and Block Chain technology” from 07.12.2020 to 12.12.2020 organized by Sanjivani College of Engineering, Kopergaon, Pune.
30. Attended AICTE STTP on” Internet of Things with Blockchain Applications and Challenges” from 04.01.2021 to 09.01.2020 organized by Vellalar College of Engineering & Technology.
31. Attended ATAL FDP on “Big Data Analytics” from 25.01.2021 to 29.01.2021 conducted by Siddhartha Institute of Engineering & Technology.
32. Attended ATAL FDP on “Cloud Technology” from 08.02.2021 to 12.02.2021 conducted by NITTR, Chandigarh.
33. Attended AICTE STTP on” Speech and Image Processing using Deep Learning Techniques” from 03.03.2020 to 09.03.2020 organized by Annamalai University.

## **Publications:**

### **National/ International Journals**

1. Lalitha, V & Latha, B 2024, ‘A novel model for hyperspectral image enhancement and classification: PCA, MBO and CNN integration’, Optical and Quantum Electronics, vol. 56, no. 3, Article No. 473, Impact Factor: 4.0.
2. Lalitha, V & Latha, B 2025, ‘Research Advances in Hyperspectral Image Classification Using Levy Artificial Bee Colony Optimization and Kernel Vision Transformer-Based Networks’, IETE Journal of Research, vol. 71, no. 8, pp. 2635–2657. Impact Factor: 2.5.
3. Published paper titled " A Review on Remote Sensing Imagery Augmentation using Deep Learning " Materials Today Proceedings , Elsevier Publications, March 2022.
4. Published paper titled " Vision Platform Lesion Quality Measurement of Accessible Endoscopic Images Using Machine Learning Techniques" Journal of Physics: Conference Series : 1964 062096 , IOP Publishing .
5. Published paper titled " A Supply Chain Framework for Identified Internet Services Based on Block chain" Journal of Physics: Conference Series : 1964 062043 , IOP Publishing .
6. Published paper titled " Essential Preliminary Processing methods of Hyper spectral images of crops" 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE)
7. Published paper titled ” Astute Remedy for Autism "Developing an Interactive Real

Time Application Along With a Hardware Product to Help Youngsters With Autism"  
ICCPET 2020 Journal of Physics: Conference Series 1712 (2020) 012038 IOP  
Publishing doi:10.1088/1742-6596/1712/1/012038 (Scopus Indexed)

8. Published paper titled "Leukocyte counting and reporting using densenet - Deep Learning", IEEE Xplore, DOI: [10.1109/ICPECTS49113.2020.9337022](https://doi.org/10.1109/ICPECTS49113.2020.9337022) .(Scopus Indexed).
9. Published paper titled "Anti-Spoofing Authentication" International Journal of Engineering and Advanced Technology (IJEAT)ISSN: 2249 – 8958, Volume-9 Issue- 1S, October 2019. DOI:10.35940/ijeat.A1021.1091S19 (Scopus Indexed).
10. Published paper titled "Humans and Robots —Identifying the Person or Bionic Person through Chabot- Dusting off The Turing Test" International Journal of Engineering Research in Computer Science and Engineering(IJERCSE)Vol 6, Issue 7, July 2019 ISSN (Online) 2394-2320 UGC JOURNAL
11. Published paper titled "ML Based Personal Assistant " International Journal of Engineering Research in Computer Science and Engineering(IJERCSE)Vol 6, Issue 7, July 2019 ISSN (Online) 2394-2320 UGC JOURNAL
12. Published paper titled "Mobile based Secured Student Online Exam System", International Journal of Engineering and Technology (IJET), Volume 7 Issue 1.7, Feb 2018. (Scopus Indexed).
13. Published Paper titled "Outsourced Media Search over Encrypted Data in Server", International Journal of Multee-Disciplinary Research, Volume 3 Issue 2, Apr-May 2017.
14. Published Paper titled "Effective Image Retrieval Using Half toning Based Block Truncation Coding" in INTERNATIONAL JOURNAL OF SCIENCE AND INNOVATIVE ENGINEERING & TECHNOLOGY, MAY 2016 ISSUE, VOLUME 1, ISBN 978-81-904760-8-9.

#### **Awards :**

1. Received the award for "Maximum Authors Contributing for a book on COVID 19 and its impact " by ESN publications in the month of January,2021.
2. Received the award for " Consistent and Active mentor" in ATAL Tinkerpreneur 2021 by AIM (ATAL Innovation Mission) and NITI AYOOG, Govt of India.
3. Acted as a Reviewer for International Conference on Mobile Networks and Wireless Communications (ICMNBC-2021) organized by Department of Electronics and Telecommunication Engineering, Sri Siddhartha Institute Of Technology, Tumkur in association with IEEE Bangalore Section and Co-Sponsored by Technical Institute For Engineers (TIE) during 03-04 December, 2021.
4. Acted as a Reviewer for 3rd International Conference on Frontiers of Science and Technology, 2021 organized by KIET Group of Institutions, Ghaziabad, U.P, India
5. Acted as a Reviewer for the "2022 International Conference on Computational Communication and Informatics " organized by Sri Shakthi Institute of Engineering and Technology Coimbatore held online during January 25 to 27, 2022.

#### **Books / Book Chapters:**

1. Published a Book Titled "Theory of Computation" in SIA Publications, Hyderabad in the month of September 2019.
2. Published a Book Titled "Recent Trends in Engineering & Technology" in Sairam Engineering college Publications, Chennai during 2020. ISBN-9788194714989
3. Published a Book Chapter titled "Management Analytics and software Engineering" ESN Publications, ISBN-978-81-950305-5-2, page no:200-205, January 2021.
4. Published a Book Chapter titled "Cloud Computing with Wireless Network and Pattern recognition " during 2021. ISBN : 9788195258536

**Patent:**

1. Published a patent titled “Anti-Spoofing Authentication” in the month of November 2019 and got published in December 2019.
2. Published a Patent titled " IOT Based Energy Management System In Microgrid Using Lorawan" on 27.10.2021.
3. Published a Patent titled "CLASSIFICATION OF ATRIAL -FIBRILLATION DISEASE USING MACHINE LEARNING ALGORITHMS” IPR NO:202241064104 PUBLISHED ON:10.11.2022
4. Published a Patent titled “IoT-driven Artificial Intelligence-Based Actual Structure-Health Monitoring and Damage Testing”, IPR NO:202341034151PUBLISHED ON: 15/05/2023
5. Published a Patent titled “AN IOT BASED CROP SUGGESTER APPLICATION USING THE NUTRIENT CONTENT OF THE SOIL” , IPR NO: 202341071340A, PUBLISHED ON 19.10.2023.
6. Published a Patent titled”GUARDIAN PI: SMART WATCH NIGHT SURVEILLANCE” ,IPR NO: 202441075613 PUBLISHED ON :18/10/2024

**National/ International Conferences**

1. Presented paper on the title " Facilitation of Smart Car Assistance system using IOT" International Conference For Pheonixes On Emerging Current Trends In Engineering And Management at Panimalar Engineering College (26.03.2021 and 27.03.2021)
2. Presented Paper titled” Essential Preliminary Processing methods of Hyper spectral images of crops”, 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 26-27 December, 2020, Bhubaneswar, India,
3. Presented Paper titled “Leukocyte Classification and Reporting Using Densenet – Deep Learning”, Virtual IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS 2020) organized by dept of EEE , Sri Sairam Engineering College, 10<sup>th</sup> and 11<sup>th</sup> December 2020.
4. Presented Paper titled “Astute Remedy for Autism "Developing an Interactive Real Time Application Along With a Hardware Product to Help Youngsters With Autism ", International Conference on Computational Physics in Emerging Technologies, organized by Srinivas University, Mangaluru, Karnataka on 1<sup>st</sup> August 2020
5. Presented Paper titled “Block chain Based Food Supply Chain Management”, International conference on Computational Science and Technology ICCST 2020, organized by

dept of CSE, Sri Sairam Engineering College, 5<sup>th</sup> March 2020 & 6<sup>th</sup> March 2020.

6. Presented Paper titled “A Programmed Implication of Fire Breakouts to the fire station using AI”, International conference on Computational Science and Technology ICCST 2020, organized by dept of CSE, Sri Sairam Engineering College, 5<sup>th</sup> March 2020 & 6<sup>th</sup> March 2020.
7. Presented Paper titled “Leukocyte Classification and Reporting Using Densenet – Deep Learning”, International conference on Computational Science and Technology ICCST 2020, organized by dept of CSE, Sri Sairam Engineering College, 5<sup>th</sup> March 2020 & 6<sup>th</sup> March 2020.
8. Presented Paper titled “Anti-Spoofing Authentication”, National conference on Smart Innovations in Communications and Computing, organized by dept of CSE, Sri SaiRam Engineering College, 5<sup>th</sup> March 2019.
9. Presented Paper titled "ML Based Personal Assistant ", National conference on Smart Innovations in Communications and Computing, organized by dept of CSE, Sri SaiRam Engineering College, 5<sup>th</sup> March 2019.
10. Presented Paper titled “Audience Management System” Fourth International Conference on Science, Engineering and Technology ICONSET 18, Jeppiaar Engineering College, Chennai,23- 24th March 2018.
11. Presented Paper titled " Active Trust and Fish Bone Routing in Wireless Sensor Networks", National conference on Recent Issuess in Network Galaxy-RING, organized by dept of CSE, R.M.D.Engineering college, 4<sup>th</sup> April 2017.
12. Presented Paper titled “Student Oriented Mobile Based Secure online Examination System", National conference on Recent Issuess in Network Galaxy-RING, organized by dept of CSE, R.M.D.Engineering college, 4<sup>th</sup> April 2017.
13. Presented Paper titled “Outsourced Media Search over Encrypted Data in Server”, Proceedings of the International Conference on Recent Developments in Engineering Research “(ICRDER-2017, ISBN-978-1544760957) on 19<sup>th</sup> March,2017 held at Hotel Chennai Gateway, Chennai
14. Presented Paper titled " Active Trust and Fish Bone Routing in Wireless Sensor Networks", International conference on Computational Science and Technology, organized by dept of CSE, Sri SaiRam Engineering College, 9<sup>th</sup> and 10<sup>th</sup> March 2017.
15. Presented Paper titled ‘Effective Image Retrieval Using HalfToning Based Block Truncation Coding ’, Proceedings of International conference on science and Innovative Engineering , Jawahar engineering college, 3<sup>rd</sup> April 2016.
16. Presented Paper titled " HalfToning Based Block Truncation Coding for Effective Image Retrieval", International Conference On Recent Trends In Engineering And Technology At St.Joseph Institute Of Technology On 28th April 2016.
17. Presented Paper titled “Recognition of Hand Gesture by capturing device for Sign Language”,

International Conference on Engineering Trends in Engineering, Technology and Management (ICETM'15) at R.V.S college of Engineering & Technology, Dindigul during 16<sup>th</sup> and 18<sup>th</sup> April, 2105.

18. Presented Paper titled " Trajectory of Hand Gesture Capturing Device for Sign Language Recognition', National Conference on Emerging and Innovative Trends in Computer Science NCEITC'15 at S.Veerassamy Chettiar College of Engineering and Technology on 18th March 2015.
19. Presented Paper titled "Dynamic Virtual Password Composer for Protecting Users From Password Theft", Proceedings of the 7<sup>th</sup> National Conference on Novel Notions in Engineering communication and Technology (NCONNECT-2014) on 7<sup>th</sup> March 2014, Department of IT, S.A.Engineering College.

