

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

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

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| Name & Photo :                                | J.JEGAN AMARNATH<br>                       |
| Designation:                                  | Associate Professor  |
| Qualification :                               | B.E., M.E.,(Ph.D)  |
| Area of Specialization :                      | Data Mining and Data Warehousing,Medical Image processing,Machine Learning.  |
| Experience :                                  | Teaching :<br>UG: 24 YEARS<br>PG : 3years  |
| No. of workshop / Conferences / FDP attended: | 9 / 25 / 24  |
| Publications :                                | Journals<br>National :10<br>International :10<br>Conferences<br>National : 12<br>International : 14<br>Patent: 7<br>Book : 3 |
| Research Guidance :                           | NIL  |

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|----------------------------|--|
| <p>General :</p>           | <ul style="list-style-type: none"> <li>● Acted as ISO Coordinator</li> <li>● Acted as Coordinator and Session Chair In-charge for International Conference ICCST'17</li> <li>● Acted as Symposium Coordinator.</li> <li>● Acted as Time Table Coordinator for CSE department</li> <li>● Acted as Project &amp; Mini-project Coordinator</li> <li>● Class Committee Coordinator</li> <li>● Life Member, Indian Society for Technical Education , IACSIT</li> <li>● Life Member, International Association of Engineers member, IAENG</li> <li>● Lab In charge</li> <li>● Extra-curricular and co-curricular coordinator</li> <li>● Acted as Organizing Secretary for National Conference on Smart Innovation of Communication &amp; Computing NCSICC'18</li> <li>● Member, Institute of Electrical and Electronics Engineers, IEEE</li> </ul> |
| <p>Staff Achievements:</p> | <ul style="list-style-type: none"> <li>● <b>Cisco certified trainer.</b></li> <li>● Produced centum results in many subjects.</li> <li>● Published paper in reputed International Journals.</li> <li>● Presented papers in various National and International Conferences.</li> </ul>  |

### PROFESSIONAL EXPERIENCE:

| Sl. No | College / Organization          | Designation         | Period     |            |
|--------|---------------------------------|---------------------|------------|------------|
|        |                                 |                     | From       | To         |
| 1      | AMS POLYTECHNIC COLLEGE         | LECTURER            | 17.11.1998 | 30.05.2000 |
| 2      | AMS COLLEGE OF COLLEGE          | LECTURER            | 14.06.2000 | 18.06.2002 |
| 3      | SRI SAI RAM ENGINEERING COLLEGE | ASSOCIATE PROFESSOR | 30.08.2004 | TILL DATE  |

### PATENT

- ❖ Filed Indian patent on 12.10.20 the innovation titled “**Machine Learning Based Techie Safety Belt to Prevent the Sleepiness of Drivers**”. (Application No 202041044323).
- ❖ Filed Indian patent on 12.10.20 the innovation titled “**A Machine Learning Based Automated Toilet Cleansing System with Automated Doors**”. (Application No 202041044307).
- ❖ Filed Indian patent on 12.10.20 the innovation titled “**An Automatic Hospital Stretcher That Monitors Vital Data’s of The Patients**”. (Application No 202041044322).
- ❖ Granted Australian patent on 10.10.2020 (Application No 2020102663 ) titled “**Cooperative Sensing, Communication and Control of IoT Network using Machine Learning Algorithms**”
- ❖ Filed Indian patent on 19.10.23 the innovation titled **ENHANCED AUTISM DETECTION USING DEEP LEARNING TECHNIQUE** Application No **202341071359**

### BOOK PUBLICATIONS

- ❖ Published a book chapter titled “**Technical Analysis on Spammer detection using Machine Learning and data mining techniques**” in Book titled “**Machine Learning and Applications**”. ISBN: 978-93-86923-47-9, Publisher: Dipti Press Pvt Ltd. Chennai. Sep 2020.
- ❖ Published a book titled “**Advanced Machine Learning** ” Notion press ISBN:78-1648998560, 1648998569 2 Jun 2020

### JOURNALS & CONFERENCE PUBLICATIONS::

- Presented a paper titled **Advanced MAC scheme for voice/Data traffic on wireless network** at a national conference on **Recent approaches in communication and information technology in Madha engineering college**
- Presented a paper titled **An Overview of Handoff in Fourth generation mobile networks at a international conference on Innovative Computing, Information and communication technology** at sri sai ram engineering college on 16<sup>th</sup> to 18<sup>th</sup> Dec 2009
- Presented a paper titled **Optimizing prediction theory algorithm for universities data using MLA algorithm** in National Conference on Magus Info Electro Tech-14,29<sup>th</sup> March 2014
- Presented a paper in International Journal of Advanced and Innovative Research IJAIR- Volume 3 Issue 4 (April 2014) titled **Robust Face Recognition Technique Based on Granular Computation and Hybrid WLD Spatial Feature Extraction**
- Presented a paper in **Efficient Refining of Why-not Questions on Top-KQueries National Conference on Emerging Trends and Intelligence Technologies (EIT'2015)** at Anand Institute of Higher Technology on 14<sup>th</sup> March 2015
- Presented a paper on **Encapsulation of Efficient and Deep Access Web Crawler** , Proceedings of International conference on engineering technology and science, Muthayammal engineering college, 18<sup>th</sup> & 19<sup>th</sup> march **2016**, pp.1449.
- Presented a paper in **Efficient Semantic Personalized Search Using RDF in Web Services**”, 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**.
- Presented a paper in” **Plant Identification using Leaves with Particle Swarm Optimization and Firefly Algorithm**” International Conference on Computational Science and Technology Organised by CSE dept, Sri Sai Ram Engineering College,9<sup>th</sup> and 10<sup>th</sup>March **2017**.
- Published paper on” **ALERT CLUSTERING METHOD FOR INTRUSION DETECTION**”, International Journal of Pure and Applied Mathematics Volume 118 No. 19 ,2018, 2703-2711ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version),url: <http://www.ijpam.eu>. (**SCOPUS INDEXED**).
- Published paper on “**On-Time Order Effortless Replenishment Ordering of Merchandise Using Internet Of Things**”, International Journal of Pure and Applied Mathematics Volume 118 No. 19 ,2018, 2713-2725.ISSN: 1311-8080 (printed version); ISSN: 1314-3395 (on-line version),url: <http://www.ijpam.eu>. (**SCOPUS INDEXED**).
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- Presented a paper in “**coarse grain load balance algorithm for Detecting dna in a database**”, National Conference on Smart Innovations in Communications and Computing (NCSICC'18) – Orgazised by Dept of CSE,Sri SaiRam Engineering College chennai on 27th March 2018.
- Presented a paper in “**chronic Conjecture and Uncertainty Detection by Machine Learning**”,

National Conference on Smart Innovations in Communications and Computing (NCSICC'18) –  
Organized by Dept of CSE, Sri Sai Ram Engineering College Chennai on 27th March 2018

- Published paper in **“IDENTIFYING TWITTER BOTS BASED ON TRENDING HASHTAGS USING MACHINE LEARNING ALGORITHMS”** Journal of Emerging Technologies and Innovative Research © 2019 JETIR June 2019, Volume 6, Issue 6
- Published a paper in International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1S, October 2019, titled **“Augmented Reality in Military Applications”**.
- Published a paper in International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1S, October 2019, titled **“Military Database Security via Justapose Database Shuffling”**.
- Published a paper in International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1S, October 2019, titled **“I-Voting on Cloud Framework”**.
- Published a paper in International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1S, October 2019, titled **“Blockchain in India”**.
- Published a paper in Journal of Green Engineering (JGE) **“Safe and Optimized Cardiac Image Processing Techniques for Quantifying Right Ventricle Dimensions with Nuclear Morphological Analysis”** Volume 10 Oct 2020.
- Published a paper in Journal of Physics: Conference Series **“Confidentiality Guaranteed E-Health Treatment for Cloud Cover Enhanced Systems Based on IoT”** 2021/7/1

Published a paper in Cardiometry **“An Enhanced Prediction Model For Autism Spectrum Disorder”** 2022/12/1 ISSN 2304-7232

Published a paper in International Conference on Computational Science and Technology (ICCST) **“Hybrid Model of K-Means Clustering and SVM to Detect Ailments in Vegetables”** 2022/11/9

Published a paper in International Journal of Early Childhood Special Education **“Data Security In Databases In Medical Clinic”** 2022/1

Published a paper IETE Journal of Research **“An Efficient Liver Disease Prediction Using Mask-Regional Convolutional Neural Network and Pelican Optimization Algorithm”** 2023/2/18

Published a paper in AIP Conference Proceedings **“Behaviour-constrained support vector machines for FMRI data analysis”** 2023/1/30

Published a paper in International Journal for Research in Applied Science & Engineering Technology **“Sewage Monitoring and Maintenance Alert using IoT”**. 2023/5

Published a paper in International Conference on Smart Technologies for Smart Nation (SmartTechCon 2023) **“Optimizing Water Distribution Pump Scheduling with SVM-Based Machine Learning Using IoT Sensor Data”2023**

Published a paper in Intelligent Computing and Control for Engineering and Business Systems Icccebs 2023 titled **” Route-Based User Segmentation and Clustering: A Machine Learning Approach for Enhanced Transportation Service”**.

Published a paper in **2023 2nd International Conference on Smart Technologies for Smart Nation Smarttechcon 2023** titled **Smart Waste Collecting Robot Integration With IoT and Machine Learning**

Published a paper in Aip Conference Proceedings titled **Behaviour-Constrained Support Vector Machines for FMRI Data Analysis**

Published a paper in 4th International Conference on Sustainable Expert Systems Icses 2024 Proceedings titled **Naive Bayes-based Autonomous Illumination System for Urban Green Spaces with Cloud Assistance**

Published a paper in 4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India 2024 titled **Enhanced Autism Detection Using Deep Learning Technique**

Published a paper in IETE Journal of Research titled **An Efficient Liver Disease Prediction Using Mask-Regional Convolutional Neural Network and Pelican Optimization Algorithm**

Published a paper in 4th International Conference on Power Energy Control and Transmission Systems Harnessing Power and Energy for an Affordable Electrification of India 2024 titled **MR-PC-A Multi-Reality Personal Computer with Minimal I/O Hardware**

Published a paper in Expert Systems with Applications 2024 titled **Detecting diabetic retinopathy using a hybrid ensemble XL machine model with dual weighted-Kernel ELM and improved mayfly optimization**

Published a paper in **Computer Methods in Biomechanics and Biomedical Engineering 2025** titled **Enhanced cardiovascular disease prediction: AMWOA-based feature selection and PyramidConvFormer-VAE fusion approach**

Published a paper in **SN Computer Science 2025** titled **An Enhanced Detection System of Autism Spectrum Disorder Using Thermal Imaging and Deep Learning**

Published a paper in **2025 International Conference on Computing and Communication Technologies (ICCCT)** titled **An Automated Detection System of Autism Spectrum Disorder Using Optimal Feature Selection-Based Adaptive RNN with Attention Mechanism**

Published a paper in **2025 IEEE Pune Section International Conference (PuneCon)** titled **OvaAI: HyperFused Multi-Modal Deep Learning and Graph-Augmented Diagnostics for Early Ovarian Cancer Detection**

Published a paper in **Physical and Engineering Sciences in Medicine 2026** titled **An automated detection system of autism spectrum disorder using meta-heuristic approach of adaptive LSTM with bayesian learning technique**

#### **STAFF DEVELOPMENT PROGRAMS AND WORKSHOPS:**

- Attended **Faculty Development Programme on Visual Programming** conducted by **Centre for Faculty Development, Anna University at Arulmigu Kalisalingam Engineering College** from 7<sup>th</sup> November 2004 to 12<sup>th</sup> November 2004.
- Attended **“Two-day workshop on Network security”** conducted by **M.N.M.Jain Engineering College, Chennai**, from 24<sup>th</sup> and 25<sup>th</sup> September 2004
- Attended **“Two-day workshop on Software Testing & Quality Management”** conducted by **R.M.K. Engineering College, Chennai**, on **23<sup>rd</sup> December 2004**
- Attended a national level conference on **Distributed system and knowledge Engineering** from 16<sup>th</sup> and 17<sup>th</sup> sep 2005 at sri sai ram engineering college
- Attended a training programme on **IBM Rational Suite** at sri sai ram engineering college from 3<sup>rd</sup> and 4<sup>th</sup> sep 2005
- Attended Five days online ATAL FDP On **“Data Sciences”**, From 16.11.2020 to 20.11.2020 organized by, Indian Institute of Information Technology, Design &

Manufacturing Kancheepuram.

- Attended AICTE sponsored Six days online STTP On “**Incorporating the techniques of Block Chain & Artificial Intelligence to face the security and privacy challenges of IT infrastructure – Industry Approach & Implementation Data Sciences**”, From 23.11.2020 to 28.11.2020 organized by, KCG College of Technology, Chennai.
- Attended Five days online ATAL FDP On “**Cyber Security**”, From 30.11.2020 to 04.11.2020 organized by, Sri Venkateswara College of Engineering, Chennai.
- Attended Five days online ATAL FDP On “**Machine Learning**”, From 07.12.2020 to 11.12.2020 organized by, R.M.K COLLEGE OF ENGINEERING AND TECHNOLOGY, Chennai.
- Attended “**National Level Seminar on Research Methodology**” conducted by **Sri Sai Ram Institute of Management Studies**, Chennai on 9<sup>th</sup> February 2005.
- Attended “**Two-day workshop on .Net & C#**” conducted by **Sri Sai Ram Engineering College** in association with **Computer Society of India, Chennai Chapter** on 17<sup>th</sup> and 18<sup>th</sup> December 2004.
- Attended a staff development programme on **web services and application** from 5<sup>th</sup> to 17<sup>th</sup> may 2008 at sri sai ram engineering college
- Attended a staff development programme on **mobile networks** from 19<sup>th</sup> to 30<sup>th</sup> Jan 2009 at sri sai ram engineering college
- Attended a National conference on **Information and communication technology** from 9<sup>th</sup> and 10<sup>th</sup> march 2007
- Attended a staff development programme on **Information technology in telemedicine and E-Health** from 9<sup>th</sup> to 21<sup>st</sup> July 2007 at sri sai ram engineering college
- **Attended a seminar in Entrepreneurial awareness and development programme** in sri sai ram engineering college 15<sup>th</sup> and 16<sup>th</sup> Feb. 2007
- Presented a paper titled **Advanced MAC scheme for voice/Data traffic on wireless network** at a national conference on **Recent approaches in communication and information technology in** Madha engineering college
- Presented a paper titled **An Overview of Handoff in Fourth generation mobile networks** at an international conference on **Innovative Computing, Information and communication technology** at sri sai ram engineering college on 16<sup>th</sup> to 18<sup>th</sup> Dec 2009

- Attended “**Two-day workshop on Grid computing**” in sathyabama university, Chennai on 19<sup>th</sup> and 20<sup>th</sup> march 2010.
- Attended AICTE sponsored seminar on **cloud computing and mining** conducted by MCA department in sir sai ram Engg College on 26/09/2013 to 27/09/2013
- Attended FDP on **Big Data and Internet Of Things** in sai ram engineering college on 10-2-2014 to 14-02-2014
- Attended FDP on **Cloud computing and Big Data** in sri sai ram engg college on 8/12/14 and 09/12/14
- Attended a Workshop on **Mobile Application Development** in sri sai ram engg college from 17/02/2018 to 20/02/2018
- Training program for instructors on **CCNA (1& 2)-(Routing & Switching)** at cisco training center, amritanagar, Coimbatore. From 25/07/2016 to 6/08/2016