


Sri Sai Ram Engineering College

Department of Computer Science and Engineering

Name & Photo:	S.HEMAVATHI 
Designation:	Associate Professor
Qualification:	M.E,(PhD)
Area of Specialization:	Computer Networks, Wireless Sensor Networks in IOT
Year of Experience: :	Teaching : 19 yrs UG with 7 years PG with 12 years Industry: Nil
Publications:	Journal International : 4 National : 06 Conference International : 22 National: 9 Books : 02 Book Chapter : 02
Membership in Professional Bodies	<ul style="list-style-type: none"> ● Member, International Association of Engineers member, IAENG ● IEI Lifetime Membership ● ISTE Membership ● IEEE Membership ● Research and Publication (IFERP)
Responsibilities	<ul style="list-style-type: none"> ● IEI Department Level Coordinator ● Acted as Symposium Coordinator ● Acted as Class Coordinator ● Department Library Coordinator ● Acted as Project & Mini-project Coordinator
Achievements	<ul style="list-style-type: none"> ● Received Best Faculty Award-2021,2023 ● Completed NITTTR Module upto 7 ● Participated in 16 hrs,Two days in IGEN GREEN SDG CONCLAVE 2020 ● Certified in NPTEL course(Big Data, Cloud Computing,IoT) ● Top 50 most popular mentors of Students in ATL Tinkerpreneur 2022 ● Published paper in reputed International and National Journals. ● Presented papers in various National and International Conferences.

Professional Experience:

Sl. No	College / Organization	Designation	Period	
			From	To
1	Ranipettai Engineering College	Lecturer	06.06.2004	05.06.2005
2	Madha Engineering College	Lecturer	06.06.2005	06.06.2012
3	Sri Sai Ram Engineering College, Chennai	Assistant Professor-II	07.06.2012	Till Date

BOOK CHAPTER:

1. Published a Book Chapter in Emerging Technologies in Engineering Research Chapter 21-: Artificial Intelligence and Network Security, Technical Research Publications ISBN: 978-93-5419-211-1.
2. Published a Book Chapter in Scope of Federated learning in next Gen Industrial Systems ISBN:978-93-5777-445-1.

BOOK PUBLICATION :

1. Published a Book in the name BIG DATA ANALYTICS published by Book Rivers ISBN:978-93-5515-659-4
2. Published a Book in the name Artificial Intelligence and Machine Learning Concepts by Good Writers Publishing ASTN:BOB1CGSUB7

PATENT DETAILS:

1. Filed and Published Indian patent on the innovation titled "**IOT BASED SMART E-METER**" (Application No.202141018332 A) on 07/05/2021
2. Filed and Published Indian patent on the innovation titled "**CARDIO VASCULAR DISEASE PREDICTION SYSTEM USING MACHINE LEARNING**" (Application No.202241002512) on 17.01.2022
3. Filed and published Indian Patent on the "**AN EFFICIENT FRAMEWORK FOR SEGMENTATION AND CLASSIFICATION OF CANCER CELL IMAGES USING DATA MINING TECHNIQUES**"(Application No. 202241026611) on 27.05.2022.
4. Filed and published Indian Patent on the "**IOT BASED WEARABLE HEALTH MONITORING AD ASSISTED LIVING OF ELDERLY PEOPLE**"(Application No. 202241037204) on 29.06.2022.
5. Filed and published Indian Patent on the "**PRECISE DIAGNOSIS OF LIVER LESION**"

USING MACHINE LEARNING TECHNIQUES”(Application No. 202241043179) on 28.07.2022.

APPRECIATION CERTIFICATE:

1. Acted as Session Chair & Reviewer in the Second National Conferences NCSICC'21 on Mar 24 2021 organized by CSE Dept, Sri Sai Ram Engineering College.
2. Acted as Reviewer in IEEE Technically sponsored First International Conference Computational Science and Technology ICCST 2022 on Nov 9th and 10th 2022 organized by CSE Dept, Sri Sai Ram Engineering College.

AWARD:

1. Received **BEST FACULTY ADVISOR AWARD** from The Institution of Engineers (India) All India Students committee (AISC) ON September 2021.
2. Received Mentor Certificate for Being one of the 50 Top performing and most popular mentors for students in ATL Tinkerpreneur 2022.
3. Received **BEST FACULTY ADVISOR AWARD** from The Institution of Engineers (India) All India Students committee (AISC) ON September 2023.

PROPOSAL:

1. Submitted a proposal in UNNAT BHARAT ABHIYAN title “Air Pollution Monitoring System” Authors Dr.K.Latha, Assistant Professor, S.Hemavathi, Assistant Professor, Sri Sairam Engineering College
2. Submitted a proposal in TNSCSTC the title MADECRYPT-DECENTRALIZED FINANCE APP USING POLYGON FRAMEWORK BASED ON ETHEREUM BLOCKCHAIN by the Students Srinidhi.S, Rubasri.S under the Guidance of S.Hemavathi, Assistant Professor for the academic year 2020 - 2021.
3. Submitted a proposal in TNSCSTC the title SKIN CARE AND ANALYSIS USING ARTIFICIAL INTELLIGENCE by the Students Narmada Devi.K, Kamai.S.U under the Guidance of S.Hemavathi, Assistant Professor for the academic year 2020 - 2021.

JOURNAL PUBLICATIONS

- Published paper titled “HFLFO: Hybrid fuzzy levy flight optimization for improving QoS in wireless sensor network” Ad Hoc Networks, Volume 142, 1 April 2023, <https://doi.org/10.1016/j.adhoc.2023.103110>
- Published paper titled “Vaelan Smart Irrigation System Using Iot”, 3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS | 2022 IEEE | DOI:10.1109/ICPECTS56089.2022.10046955
- Published paper titled “Fault Diagnosis in wireless Sensor Network”, 3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS | 2022 IEEE | DOI: 10.1109/ICPECTS56089.2022.10046836
- Published paper titled “System for Prioritizing Covid-19 Patients Based on Certain Parameters”, 3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS | 2022 IEEE | DOI: 10.1109/ICPECTS56089.2022.10047794

- Published paper titled “Medical Assistant App”, 3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS | 2022 IEEE | **DOI:** 10.1109/ICPECTS56089.2022.10047617
- Published paper titled “Image Forgery Detection Using Machine Learning”, 3rd International Conference on Power, Energy, Control and Transmission Systems, ICPECTS | 2022 IEEE | **DOI:** 10.1109/ICPECTS56089.2022.10046422
- Published paper titled “Smart Security System”, 1st International Conference on Computational Science and Technology, ICCST 2022 IEEE | **DOI:** 10.1109/ICCST55948.2022.10040301
- Published paper titled “The Convergence of Traffic Management System”, 1st International Conference on Computational Science and Technology, ICCST 2022 IEEE | **DOI:** 10.1109/ICCST55948.2022.10040468
- Published paper titled “Bogus Specie Recurrence”, 1st International Conference on Computational Science and Technology, ICCST 2022 IEEE | **DOI:**10.1109/ICCST55948.2022.10040401
- Published paper titled “Mining Algorithm for Eliminating Redundant Data in WSN”, 2022 3rd International Conference on Electronics and Sustainable Communication Systems (ICESC)|IEEE | **DOI:** 10.1109/ICESC54411.2022.9885344
- Published paper titled “Cosmetic Product Selection Using Machine Learning”, 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT)|IEEE | **DOI:** 10.1109/IC3IOT53935.2022.9767972
- Published paper titled “Detection Of Corn Leaf Blight Using Convolutional Neural Networks”, 4th International Conference on Smart Systems and Inventive Technology, ICSSIT 2022|IEEE| **DOI:** 10.1109/ICSSIT53264.2022.9716333
- Published paper titled”Efficient Stock Prediction Technique using ML”,International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2022|IEEE | pp. 487–490
- Published paper titled “Enhanced Hybrid Encryption Through Slicing and Merging of Data With Randomization Of Algorithms ”,ICCCT- 2021 International Conference on Computing and Communicatin Technologies|IEEE| **DOI:** 10.1109/ICCCT53315.2021.9711883
- Published paper titled”Face Recognition and Mask Detection Technology for Surveillance Systems”, ICCCT- 2021 4th International Conference on Computing and Communicatin Technologies,|IEEE| **DOI:** 10.1109/ICCCT53315.2021.9711831
- Published paper titled ”Self-Activating Street Lights Using Sensors And Arduino ”,ICCCT- 20214th International Conference on Computing and Communicatin Technologies|IEEE| **DOI:** 10.1109/ICCCT53315.2021.9711871
- Published paper titled “Segmentation of affected crops using deep learning”, International Journal of Engineering and Advanced Technology(IJEAT) ,ISSN:2249-8958 ,Volume-8,Issue-5S3, July,2019
- Published paper titled “Skin Disease Prediction and Provision of Medical Advice Using Deep Learning”Journal of Physics: Conference Series,1724 (2021) 012048,doi:10.1088/1742-6596/1724/1/012048
- Published paper titled “Trust Awaken Routing For Improving the Reliable Communication in WSN”, Indian Journal of Public Health Research & Development, February 2018, Vol.9, No. 2. DOI Number: 10.5958/0976- 5506.2018.00154.7. P.No: 384-386.
- Published paper titled “Hiding Fingerprint in A Live Image using Discrete Wavelet Transform for Remote Authentication”,International Journal of Multee-Disciplinary Research,IAETSD, Vol. 3 |Issue No.2 ,March-April 2017.

CONFERENCE PUBLICATION

- Published paper titled,”Humanoids on MARS”, TEQIP-III Sponsored First International Conference on Innovations and Challenges in Computing,Analytics and Security held during 29th

and 30th July,2020 at Pondicherry Engineering college,Puducherry,India.

- Published paper titled,"Skin Disease Prediction and Provision of Appropriate Medical Advice Using Deep Learning",International Conference on Computational Science and Technology(ICCST2020)on March 6th 2020, organized by Sri Sairam Engineering college.
- Published paper titled,"Forest Fire Detection System Using IOT",International Conference on Computational Science and Technology(ICCST2020)on March 6th 2020, organized by Sri Sairam Engineering college.
- Published paper titled, "Sentiment Analysis of Social Media and Bitcoin Prediction", International Conference on Contemporary Engineering and Technology Organized by Organization of Science and Innovative Engineering & Technology in association with Prince shri venkateshwara padmavathy engineering college,prince Dr K.Vasudevan college of engineering rganiz on 10th & 11th March 2018.
- Published paper titled "Hiding Fingerprin in A Live Image using Discrete Wavelet Transform for Remote Authentication"International Conference on Recent Developments in Engineering Research , on March 19th 2017,rganized by internatonal Institute for Research and Development in Engineering and Management ISBN:978-1544760957
- Published paper titled "Fingerprint image enhancement using preprocessing and matched filtering",International Conference on Advances in Computer ,Communications & Management on 18.02.2013 – 19.02.2013.
- Published a paper Titled "Cloud Computing and Semantic Web",International Conference on Information systems and computing- ICISC'13(4.1.13&5.1.13)
- Published paper titled,"Medical Assistance Application", (NCRTCIT'22)Nationa Conference on Recent Trends in Computing and Information Technology,held on 10th March,2022
- Published paper titled,"Human Interaction Using Arduino And Python", (NCRTCIT'22)Nationa Conference on Recent Trends inC Computing and Information Technology,held on 10th March,2022
- Published paper titled," Cosmetic product selection using machine learning", (NCSICC-2021)National Conference on Smart Innovations in Communications and Computing,held on 24th March 2021.
- Published paper titled,"Plant uses and disease identification using SVM technology", (NCSICC-2021)National Conference on Smart Innovations in Communications and Computing,held on 24th March 2021.
- Published paper titled,"Stock Prediction using Deep Learning", (NCSICC- 2021)National Conference on Smart Innovations in Communications and Computing,held on 24th March 2021.
- Published paper titled,"Object Detection(Anamoly)", (NCSICC- 2021)National Conference on Smart Innovations in Communications and Computing,held on 24th March 2021.

- Published paper titled, “Sentiment Analysis of Social Media and Cryptocurrency Prediction”, National Conference on Smart Innovations in Communications and Computing (NCSICC’18) – Organized by Dept of CSE, Sri Sai Ram Engineering College organized on 27th March 2018.
- Published paper titled, “ Driver Drowsiness Detection And Prevention Of Accidents Using Eye Blink Sensors” , National Conference on Smart Innovations in Communications and Computing (NCSICC’18) – Organized by Dept of CSE, Sri Sai Ram Engineering College organized on 27th March 2018.
- Published a paper titled “Fingerprint image enhancement using preprocessing and matched filtering”, National Conference Recent trends in information technology and communication on 20.2.13 organized by Karpaga vinayaga college of engg and technology.

SDP, WORKSHOP, SEMINARS

- Attended Workshop on "Network Simulator NS2", organized by Jeppiar Engineering College, from 19.11.12 to 20.11.12.
- Attended FDP on “Soft Computing and Open Source Software ”, organized by Dept of CSE, Sri Sai Ram Engineering College, from 20.08.2012 to 24.08.2012.
- Attended FDP on “Cloud computing and Big Data”, organized by Department of CSE Sri Sai Ram Engineering College, from 8.12.2014 to 9.12.2014
- Attended FDP on “Cloud Computing and Virtualization”, organized by Department of CSE Sri Sai Ram Engineering College Department of CSE, from 2.3.2015 to 6.3.2015.
- Attended Workshop on “Mobile Application Development”, organized by CTS, siruseri 28.05.16.
- Attended Tech Workshop on Redhat(open source) Technology and industry Adaptation, organized by Sri Sairam Engineering college associated with Advantage pro, Redhat Linux on 5.12.2017.
- Attended FDP on “Smart perspectives of IOT on 5G communication-practical approach-14 days”, organized by Panimalar Engineering College, from 08.11.2019 to 21.11.2019.
- Attended Webinar on “Future AI inspired by Customer Use Case for AI-ML”, organized by ICT Academy, 9.4.2020 .
- Attended FDP on “Internet of Things”, organized by NITTTR chandigarh, from 10.4.2020 to 14.4.2020.
- Attended Webinar on “Unique Program that makes waterpreneurs”, organized by Jeppiaar Institute of Technology, on 16.6.2020.
- Attended FDP on “Latest Trends and Challenges in IT Industry”, organized by R.M.D Engineering College from 15.6.2020 to 20.6.2020.
- Attended Webinar cum Workshop on “Data Science using Python”, organized by Amrita College of Engineering and Technology, Nagercoil, from 17.6.2020 to 25.6.2020.

- Attended FDP on “Computer Vision Using Deep Learning”, organized by Panimalar Engineering College from 26.6.2020 to 30.6.2020.
- Attended FDP on “Machine Learning and Cloud Infrastructure”, organized by Jeppiar Engineering College, from 6.7.2020 to 10.7.2020.
- Attended STTP on “Deep Learning Application and Challenges in Big Data Analytics”, organized by Velalar College of Engineering and Technology from 17.8.2020 to 22.8.2020.
- Attended FDP on “Data Science”, organized by ATAL, from 7.9.2020 to 11.9.2020.
- Attended FDP on “Cyber Security”, organized by ATAL, from 21.9.2020 to 25.9.2020.
- Attended STTP on “Deep Learning Techniques for Ambient Intelligence and Smart Environment-I”, organized by R.M.D Engineering College, from 19.10.2020 to 24.10.2020.
- Attended FDP on “Research perspectives in Machine Intelligence and Computing”, organized by Sri Sairam Institute of Technology, from 27.10.2020 to 31.10.2020.
- Attended FDP on “Recent Advancements in Machine Learning and Artificial Intelligence”, organized by ATAL, from 7.9.2020 to 11.9.2020.
- Attended STTP on "Internet of Things with Blockchain Applications and Challenges", organized by Velalar College of Engineering and Technology, from 04.01.2021 to 09.01.2021.
- Attended STTP on “Speech and Image processing using Deep Learning Techniques”, organized by Annamalai University, from 03.03.2021 -09.03.2021.
- Attended STTP on “IoT Technology and Analytics”, organized by ANNA UNIVERSITY, from 18.01.2022 to 24.01.2022.
- Attended Webinar on “Frontiers in Artificial Intelligence:from automation to Societal Applications”, organized by IIIT Kottayam, on 06.07.2022.

