# Sri Sai Ram Engineering College

# **Department of Computer Science and Engineering**

Dr. S. SAMUNDESWARI
Associate Professor
M.E, Ph.D
Image processing, Machine learning, Big Data Analytics
Teaching: 19 yrs  Industry: Nil
Journal:
International: 27
National: Nil
Conference:
National: 10
International: 17
Nil
Life Member in International association of Engineers(IAENG)
Life Member in international Society for Research and Development (ISRD)
<ul><li>IEEE member</li><li>ISTE Life Member</li></ul>
NAAC Coordinator
MHRD-IIC Coordinator
Time-Table coordinator

various
•

## Acted as Resource person for various colleges

National and International Conferences

## **Professional Experience:**

S. No	College / Organization	Designation	Period	
			From	То
1.	Muthiah polytechnic, Chidambaram	Lecturer	02.07.93	29.02.96
2.	Sri Ramanujar Engineering College, Chennai	Lecturer	03.07.06	07.12.2009
3.	Sri Sai Ram Engineering College, Chennai	Associate Professor	16.12.2009	Till date

#### **Publications:**

#### **Refereed International Journals**

- 1. Samundeswari. S et al. "Custom Written Sentiment Analysis Supported Twitter Data", AIP Conference Proceedings, 2022, 2464, 060010.
- 2. Samundeswari. S et al. "Real-time Crime Detection Using Customized CNN", 1<sup>st</sup> International Conference on Computational Science and Technology, ICCST 2022 Proceedings, 2022, pp. 416–419.
- 3. Samundeswari. S et al. "Real Time System for handling customer queries using Twilio, Assembly AI and NLP ",1st International Conference on Computational Science and Technology, ICCST 2022 Proceedings, 2022, pp. 111–115.
- 4. Samundeswari.S et al. "An Application for Effective Usage of Social Platforms", 1<sup>st</sup> International Conference on Computational Science and Technology, ICCST 2022 Proceedings, 2022, pp. 235–238.
- 5. S Samundeswari, V Lalitha, V Archana, K Sreshta, "OPTICAL CHARACTER RECOGNITION FOR VISUALL YCHALLENGED PEOPLE WITH SHOPPING CART USING AI", 2022 International Virtual Conference on Power Engineering Computing and Control: Developments in Electric Vehicles and Energy Sector for Sustainable

- Future (PECCON), 2022
- 6. S Samundeswari et al. "Custom written sentiment analysis supported Twitter data", AIP Conference Proceedings, Vol.2464 / Issue 1 / 2022
- V Lalitha, S Samundeswari, R Roobinee, Lakshme S Swetha, "Decentralized Online Voting System using Blockchain", 2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC), 1387-1391, 2022
- 8. S Samundeswari et al. "NS's Secure Framework for Healthcare", 2022 International Conference on Computer Communication and Informatics, 2022
- S. Samundeswari, S.Anbahagan, "Neural Network Based Identification of Facial Abnormalities through Cephalometric Radiography using Ricketts Analysis", Indian Journal of Natural Sciences Vol.12 / Issue 70 / February / 2022
- S Samundeswari, R Sanath, S Anbazhagan, "Gesture And Motion Based Crew Management System In An Airport", Turkish Online Journal of Qualitative Inquiry (TOJQI) 6, 6152-6162, 2021
- S.Samundeswari et. al. "A Machine Learning Model for Accurate Cardiopulmonary Resuscitation Chest Compression Feature Extraction", 2021 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE), 2021
- 12. Samundeswari, S., Jeshoorin, G., Vasanth, M., "A Generic System for Processing Insurance", Advances in Parallel Computing", 2021, 38, pp. 501–505.
- Lalitha, V., Nithya, M., Samundeswari, S., Srinivasan, S., "Essential Preliminary Processing methods of Hyper Spectral images of crops" Proceedings of 2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering, WIECON-ECE 2020, 2020, pp. 468–471, 9398013
- 14. Subhiksha, S., Prakash, S., Samundeswari, S., Sangeerani Devi, A., "Start-up community using blockchain", Lecture Notes in Electrical Engineering, 2020, 659, pp. 11–18.
- 15. Aishwarya, S., Ramya, S., Subhiksha, S., Samundeswari, S., "Detection of Impersonation in Online Examinations using BlockChain", ICPECTS 2020 IEEE 2nd International Conference on Power, Energy, Control and Transmission Systems, Proceedings, 2020, 9337001.
- 16. Geetha, G., Samundeswari, S., Saranya, G., Meenakshi, K., Nithya, M., "Plant Leaf Disease Classification and Detection System Using Machine Learning", Journal of Physics: Conference Series, 2020, 1712(1), 012012.
- 17. Lalitha, V., Deepa, A., Nithya, M., Samundeswari, S.. "Astute Remedy for Autism developing an Interactive Real Time Application along with a Hardware product to help youngsters with Autism", Journal of Physics: Conference Series, 2020, 1712(1), 012038.
- 18. S. Samundeswari, T. Vimala, S.Subhiksha, "Emergency Evacuation System", Studies in Indian Place Names, Vol 40 issue 3 (s1) February 2020.
- 19. Vimala, T., Samundeswari, S., Ann Roseela, J.," Implementation of Moisture and temperature sensor in green farm using cloud technology, Journal of Advanced Research in Dynamical and Control Systems, 2019, 11(4 Special Issue), pp. 2327–2332.
- 20. Jayaselvi, P., Periasamy, J. K., Priya, M. P., & Samundeswari, S. (2019). A Methodology for Sea Border Intrusion Alert and Black Box System Using IOT. *International Journal of Psychosocial Rehabilitation*, *23*(04).
- 21. S.Samundeswari, G. Muthuram, S.Mohana priya, S.Bragatheeswari, A.Sanjeetha Dharshini," Secured and

- Transparent Perishable Goods Network Using Blockchain Technology", International Journal of Engineering Research in Computer Science and Engineering (IJERCSE), Vol 6, Issue 7, July 2019.
- 22. Anbazhagan, S., Samundeswari, S., & Dhakshinamoorthy, S. (2019). Neural Network Based Identification of Skeletal and Dental Abnormalities Using McNamara Cephalometric Analysis. *Journal of the Gujarat Research Society*, *21*(17), 2090-2105.
- 23. T. Vimala, S. Samundeswari, "flame sensor implementation in distinct fields using Cloud Technology", International Journal of Mechanical and Production Engineering Research and Development, Vol. 8 (4) 359-367 (2018) (Scopus Indexed).
- 24. S Samundeswari, V Ramalingam, B Latha and S Palanivel, "Pattern Classification Techniques for the Classification of Cutaneous Manifestations of Systemic Lupus Erythematosus", Pakistan Journal of Biotechnology, Vol. 15 (2) 333-337 (2018) (Scopus Indexed).
- 25. S. Samundeswari, V. Ramalingam, B. Latha, "Computer-aided diagnosis of systemic lupus erythematosus using immunological profile", Medico-Legal Update, 2018, 18(1), pp. 525–530.
- S Samundeswari, V Ramalingam, B Latha and S Palanivel, "Prediction of systemic lupus erythematosus based on cutaneous manifestations using machine learning models", The Pharma Innovation Journal 2017;6(10):248-251. UGC Approved Journal. UGC journal No.46096
- 27. S.Samundeswari, V. Ramalingam, B. Latha , S. Palanivel1."Decision support system for systemic lupus erythematosus using machine learning techniques". International Journal of Pharmacy & Technology, IJPT|

  April-2017 | Vol. 9 | Issue No.1 | 28437-28446. ISSN: 0975-766X( Scopus Indexed)

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

- 1. Published a book "Recent trends in Engineering and Technology" ISBN: 978-819-714-989, Sai raj Printers, 2021
- Published a Book Chapter titled "Assessment And Prioritization Of Business Analytics Projects" in Management Analytics and software Engineering, ESN Publications, ISBN-978-81-950305-5-2, page no:200-205, January 2021.
- 3. Published a Book Chapter titled "Improvised Security Features increasing Confidentiality and Authentication in Reversible Texture Synthesis in Data Hiding" in Scope of Federated Learning in Next Gen Industrial Systems, Immortal Publications, ISBN-978-93-5777-445-1, page no:80-87, December 2022.
- 4. Published a Book Chapter titled "Stock Market Prediction using Machine Learning" in Scope of Federated Learning in Next Gen Industrial Systems, Immortal Publications, ISBN-978-93-5777-445-1, page no:129-140, December 2022.

#### **Patents:**

- 1. Published a patent titled "IOT based Energy Management System in microgrid using LORAWAN".
- 2. Published a patent titled "Bias Correction Of Nwp Model Temperature Forecasts For Cities Using Deep Learning"
- 3. Published a patent titled "Minimal Machine Vision Setup For Automobile Part Inspection using Mask Based R-

- CNN And Digital Microscope".
- **4.** Cooperative Sensing, Communication and Control of IoT Network using Machine Learning Algorithms(**Granted**)

#### **National and International Conferences:**

- 1. Custom Written Sentiment Analysis Supported Twitter Data", AIP Conference Proceedings, 2022, 2464, 060010.
- Real-time Crime Detection Using Customized CNN", 1<sup>st</sup> International Conference on Computational Science and Technology, ICCST 2022 at Sri Sairam Engineering College (09.11.2022 and 10.11.2022).
- Real Time System for handling customer queries using Twilio, Assembly Al and NLP ",1st International Conference
  on Computational Science and Technology, ICCST 2022 at Sri Sairam Engineering College (09.11.2022 and
  10.11.2022).
- 4. An Application for Effective Usage of Social Platforms", 1<sup>st</sup> International Conference on Computational Science and Technology, ICCST 2022 at Sri Sairam Engineering College (09.11.2022 and 10.11.2022).
- 5. An integrated approach for smart object recognition, IEEE international conference on computing and communication technologies, Sri Sairam Engineering college, 16-17 December, 2021.
- 6. A Generic System for Processing Insurance, International Conference For Pheonixes On Emerging Current Trends In Engineering And Management at Panimalar Engineering College (26.03.2021 and 27.03.2021).
- 7. Detection Of Body Fat Percentage And Suggesting Suitable Exercise, National conference on Smart Innovations in Communications and Computing NCSICC-2021, Sri Sairam Engineering College on 24th March 2021.
- Secure and Efficient Data Transmission in Wireless Sensor Networks with SET-IBS and SET- IBOOS, National
  conference on Smart Innovations in Communications and Computing NCSICC- 2021, Sri Sairam Engineering
  College on 24th March 2021.
- 9. 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.
- 10. Detection of Impersonation In Online Examinations Using Blockchain , Virtual IEEE International Conference on Power, Energy, Control and Transmission Systems (ICPECTS 2020) organized by dept of EEE , Sri Sairam Engineering College, 10th and 11th December 2020.
- 11. Plant Leaf Disease Classification and Detection System Using Machine Learning, International Conference on Computational Physics in Emerging Technologies, organized by Srinivas University, Mangaluru, Karnataka on 1st August 2020.
- 12. 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 1st August 2020.
- 13. Gesture And Motion Based Crew Management System In An Airport, AICTE Sponsored Online National Conference for Women on Innovations in Science, Engineering and Technology (NCWISET-2020) on 20th & 21st November 2020 at Stanley College of Engineering and Technology, Hyderabad.
- 14. Realtime Gesture And Proximity Based Employee Management System, International Conference on Intelligent Systems and Control (ISCO 2020), organized by Karpagam College of Engineering, Coimbatore on 9<sup>th</sup> and 10<sup>th</sup> January 2020.

- 15. Start-Up Community using Blockchain, International Conference on Modelling, Simulation & Intelligent Computing (MoSICom 2020), organized by BITS, PILANI, Dubai Campus, Dubai, UAE on 29<sup>th</sup> 31<sup>th</sup> January 2020.
- 16. Fabrication Detection Using Blockchain, International conference on Computational Science and Technology ICCST 2020, Sri Sairam Engineering College, 5th & 6th March 2020.
- 17. Progonosis of Lupus Nepheritis and Cutaneous Lupus in Patients with Systemic Lupus Erythermatosus Using Cascaded Autoencoders and Convolutional Neural Networks, International conference on Computational Science and Technology ICCST 2020, Sri Sairam Engineering College, 5th & 6th March 2020.
- 18. A Temporal Input Based Electricity Market Price Forecasting Using ANN, National Conference on Smart Innovations In Communications And Computing (NCSICC'19) on 5<sup>th</sup> March 2019.
- 19. Predicition System for Stroke in Day And Night, National Conference On Smart Innovations In Communications And Computing (NCSICC'19) on 5<sup>th</sup> March 2019.
- 20. Real Time Perishable Goods Network, National Conference On Smart Innovations In Communications And Computing (NCSICC'19) on 5<sup>th</sup> March 2019.
- 21. Disaster Management System using Geofencing, National Conference On Smart Innovations In Communications And Computing (NCSICC'19) on 5<sup>th</sup> March 2019.
- 22. Effective Identification of Black Money and Fake Currency using NFC and Android, International Conference on Computational Science and Technology(ICCST'17) on March 9<sup>th</sup> and 10<sup>th</sup> 2017organised by CSE dept at Sri Sairam Engineering College.
- 23. Improvized Security Features Increasing Confidentiality and Authentication in Reversible Texture Synthesis in Data Hiding, International Conference on Computational Science and Technology organised by CSE dept, Sri Sai Ram Engineering College on 9<sup>th</sup> and 10<sup>th</sup> March 2017.
- 24. Remote Authentication using steganographic Mechanism", National Conference on Computing Communication and Information Technology, 7th April 2016.
- 25. Implementing one to many data linkage using one class clustering tree, International conference on electrical communication and computing ICECC-2014, 13th & 14<sup>th</sup> March 2014.
- 26. Applying clustering technique for implementing one to many data linkage, National Conference on Novel notions in Engineering Communication and Technology (NCONNECT-2014)-7<sup>th</sup> March 2014 at S.A. Engineering College.
- 27. Machine Learning technique for facial Growth abnormalities in IEEE Sponsored National Conference in M.Kumaraswamy College of Engineering, Karur, 2009.

### **List of workshop/FDP / ISTE-STTP participated:**

FDP, WORKSHOP							
Name of the Programme	Organized by	Date					
AICTE FDP - IOT Basics	NITTTR, Chandigarh	24/04/2023 to 28/04/2023					
FDP on Communication And Computation	Dr.M.G.R. Educational and Research Institute, Chennai	13/12/2022 to 17/12/2022, 19/12/2022					

International FDP on Data Science Tools	Easwari Engineering College, Chennai	07/10/2022 to 20/10/2022
FDP on Foundations of Data Science	VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad	02/08/2022 to 07/08/2022
AICTE FDP -Cyber Crime and Forensic Tools	NITTTR, Chandigarh	23/05/2022 to 27/05/2022
ATAL FDP- Cyber Security & Cryptography: Trends and Technologies	Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram.	04/10/2021 to 08/10/2021
ATAL FDP - Data Analytics using Python/R Programming"	National Institute of Technology Puducherry, Karaikal.	23/08/2021 to 27/08/2021
ATAL FDP – Blockchain Analytics And Big Data - The Future Of Business Process	Central University of Tamil Nadu.	06/12/2021 to 10/12/2021
ATAL FDP Introduction to Quantum Computing	Tripura University.	08/11/2021 to 12/11/2021
AICTE STTP - Speech and Image Processing using Deep Learning Techniques"	Dept of CSE, Annamalai University.	03.03.2020 to 09.03.2020
ATAL FDP - Big Data Analytics	Siddhartha Institute of Engineering & Technology.	25.01.2021 to 29.01.2021
AICTE STTP - Internet of Things with Block chain Applications and Challenges	Vellalar College of Engineering & Technology.	04.01.2020 to 09.01.2020
AICTE STTP - Medical Image Analysis	V.S.B. Engineering College, Karur	02.11.2020 to 07.11.2020
AICTE STTP - Building Intelligent Applications with Deep Learning using PyTorch	Rajalakshmi Institute of Technology.	05.10.2020 to 10.10.2020
ATAL FDP -Data Science	Rajalakshmi Instituteof Technology.	24.08.2020 to 28.08.2020
IETE FDP - New Normal with Disruptive Technologies	Dr.M.G.R. Educational and Research Institute	27.07.2020 to 31.07.2020
Webinar cum Workshop - Data Science using Python	Amrita College of Engineering & Technology, Nagarcoil.	17.06.2020 to 25.06.2020
MHRD - Leadership Talk	Ms. Ashwini Deshpande (Co-Founder & Director Elephant Design)	06/06/2020.
ATAL FDP –Cyber Security	National Power Training Institute, Neyveli	16-12-2019 to 20- 12-2019
AICTE FDP - Smart Perspectives of IoT on 5g Communication – Practical Approach"	Panimalar Engineering College.	08.11.2019 to 21.11.2019
AICTE FDP - Open Source Cyber Security Tools	NITTR, Chandigarh.	18.05.20 to 22.05.20
AICTE FDP - Artificial Intelligence	NITTR, Chandigarh.	25.05.2020 to 29.05.2020

FDP-Neural Networks and CNN	NITTR, Chandigarh.	11.05.2020 to 15.05.2020
AICTE FDP - Internet of Things	NITTR, Chandigarh.	10.04.2020 to 14.04.2020
AICTE FDP - Ethical Hacking	NPTEL	September 2019
Workshop - Intellectual Property Rights & Innovations	Dept of Research & Development, Centre for Intellectual Property Rights (CIPR) Anna University.	20/07/2019
FDP - NextGen TechStack	Sri Sairam Engineering College	08/04/19 to 12/04/2019
FDP on Artificial Intelligence, Machine Learning, Cloud Computing and their Applications	Dept of CSE, Valliammai Engineering College	29/11/2018 — 04/12/2018
Workshop on Ideation and Proposal Formulation	PALS, Rural Technology Action Group, IIT Madras	09/11/2018
Train the Trainer program on SSC/Q0923QP-Security Infrastructure Specialist	IT-ITeS SSc NASSCOM	29/10/2018 — 03/11/2018
Workshop on REDHAT (Open source) Technology & industry Adaptation	Department of CSE,Sri Sairam Engineering College	05.12.2017
FDP on Data science and Big Data Analytics	ICT ACADEMY (associated With DELL EMC)in Sri Sairam Engineering College	11.09.2017 to 15.09.2017
Computational Intelligence: Fundamental Theory & Practical Applications	IEEE Computational Society & VIT University, Chennai	2/1/2017 - 6/1/2017
FDP on Grid and Cloud Computing	Sri Sai Ram Engineering college	08/09/2016, 09/09/2016
Workshop on Mobile Application Development	Sri Sai Ram Engineering College , Dept of CSE	17/2/2016 — 20/2/2016
FDP on Cloud computing and Big Data	Department of CSE, Sri Sai Ram Engineering College	8/12/2014 & 9/12/2014
FDP on Cloud Computing	Department of IT And TCS at Sri Sai Ram Engineering College	05/05/2014
Network Design – A practical Approach	Sri Sai Ram Engineering College	03/10/2013 — 04/10/2013
Workshop on Journal and Thesis writing	Dept of Mechanical Engineering, Sri Sai Ram Engineering College	19/01/2012
SDP on "Case Tools Environment	Dept. of MCA, Sri Sai Ram	21/12/2011 –
& Work Benches"	Engineering College	22/12/2011
SDP on "Soft computing with AI"	Dept. of CSE, Sri Sai Ram Institute of Technology	15/09/2011 - 28/09/2011