#### **CURRICULUM VITAE**



Dr.Soma Prathibha, Professor, **Department of Information Technology IEEE Computer Society- SBC, Chapter** Advisor **Sri Sairam Engineering College Vice Chair, IEEE WIE Madras Section** 2023-24

Faculty Advisor, HKN Nu Eta Chapter



Dr.Soma Prathibha | LinkedIn



somaprathi25@gmail.com



9444679807

# **Education**

➤ Ph.D. in Information & Communication Engineering (Specialization area is Cloud Computing), Anna University, 2012-2019.

Thesis Title: Multi-Objective Workflow Scheduling And Task Clustering For Scientific Workflow Applications In Cloud.

- ➤ M.E. in Computer Science and Engg. Sathyabama University, 2006-2008.
- ➤ B.E Computer Science and Engineering, Gulbarga University. 1993-1997.

# **Professional Experience**

- 1. Professor at Sri Sai Ram Engineering College, Chennai from 01-08-2023 to till date
- 2. Associate Professor at Sri Sai Ram Engineering College, Chennai from 01-08-2012 to 31.07.2023 .
- 3. Senior Lecturer at Sri Sai Ram Engineering College, Chennai from 01-08-2008 to 31-07-2012
- 4. Lecturer at Sri Sai Ram Engineering College, Chennai from 04-07-2005 to 31-07-2008
- 5. Faculty at Babaria Institute of Technology, Vadodara, Gujarat from 01-08-2004 to 10/05/2005
- 6. Faculty at PramukhSwamy Information Technology, Vadodara, Gujarat from 20-07-2001 to 31/07/2004

- 7. Lecturer at Sandur Polytechnic College, Yeshwanthpur, Sandur, Karnataka from 29/09/1997 to 10/01/1998
- 8. Project Engineer-I at Hindustan Aeronautics Limited "Bengaluru from 05/04/1999 to 05/11/1999

# **Achievements**

- 1. NPTEL Elite Certificate in the 12 weeks course on "Operating System Fundamentals" offered by IIT Kharagpur in Oct 2024.
- 2. NPTEL Top 2% score in the 4 weeks course "Python for Data Science" in the exam held in Sept 2024.
- 3. NPTEL Top 5% Score in the 12 week courses "Cloud Computing" and "Computer Networks and Internet protocol" in the exams held in April 2024
- 4. Received IEEE Pre University STEM funding of 750 USD for the event Physicsforge a 3 days workshop- crafting scientific minds through hands on experiments and innovative learning
- 5. Received IEEE HKN Chapter Grant of 190 USD to conduct STEM activity for Preuniversity Girl students of Govt School .
- 6. Received IEEE SPAX funding of 200 USD for the event The Saurus'24 Engineering, Innovation and Leadership
- 7. Received IEEE Best Society Award from IEEE Madras Section in annual awards presentation meet held on 25th Feb 2024
- 8. Completed Volunteer Leadership Training programme offered by MGA Training committee and recognized as VoLT Graduate 2023.
- 9. SPOC for IEEE YESIST 12 for Sri Sai Ram Engineering College Pilot for the grand finale held at Arab Academy of Science, Technology and Maritime Transport, Egypt held on 2-3 september 2023
- 10. Anna University Research supervisor-Reference Number 4140196
- 11. Faculty Mentor for the project Avahan which has been selected as the winner in the IEEE YESIST 12 Prelims ,organized by SSN College and it is selected for the Grandfinale to be conducted in Egypt which will be held in Sept 2023.
- 12. Faculty Mentor for the Project Avahan which made to grand finale in the CTS PRODGI Hackathon contest and got into Top 14 finalist position among 300 teams registered for the contest.
- 13. Received 800 USD CS Chapter Grant from GIEEE Computer Society
- 14. Selected as the panelist of IEEE STEM Summit organized by Try Engineering and IEEE Education Activities on Dec 9th 2022.
- 15. Vice chair of IEEE WIE MAS Section for the year 2023-24.
- 16. Received 4000 USD from IEEE HAC/SIGHT for the proposal Rural Solar Electrification Station Project in October 2022 and it is successfully implemented at Nallur High School, Poonthandalam Village, Chennai in June 2023
- 17. Received Seed fund of 200 USD from IEEE Try Engg and Education Activities to conduct STEM event

- 18. Mentor for team ARAMM selected as Smart India Hackathon 2022 Finalist which worked on problem statement given by All India Council for Technical Education (AICTE) /Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment and worked on the problem statement "Difficulties in walking with white cane in surrounding environments"
- 19. Selected as IEEE STEM Champion for the year 2022 by IEEE Educational Activities, USA
- 20. Elevated to IEEE Senior Membership Grade on 30.04.2022.
- 21. Funding of 200 USD from IEEE Computer Society as Chapter grant for 2022 is approved to conduct CS society event.
- 22. Iot In Healthcare" which was awarded Best Project in Project exhibition 2022,organized by Department of Information Technology,Sri Sairam Engineering College.
- 23. Completed Microsoft Certified Azure Fundamentals certification course on Feb 17,2022.
- 24. Co-chair for 4th International Conference on Computing and Communication Technologies (ICCCT'21) on 16.12.2021 and 17.12.2021 (IEEE Conference ID:53315) proceedings of the conference available in IEEE Digital Explore https://ieeexplore.ieee.org/xpl/conhome/9711752/proceeding
- 25. Received Certificate of Appreciation-Mentor for NPTEL online certification course "Python for Data Science" Jan-April 2021.
- 26. Team Lead for "Sai Sthree Vidhya Abhiyan" which received AICTE Lilavaty Award I Runner Award under the Subtheme "Literacy" on April 12,2021 with cash prize of 50000INR
- 27. Received funding of 200 USD from IEEE SPAA to conduct InterNational Level Hackathon contest during May 2021.
- 28. Received certificate of appreciation from NPTEL for translating the course "Introduction to Industrial IoT" Conducted by IIT Kharagpur in Aug-Sep 2020
- 29. Received funding of 200 USD and 400 USD from IEEE SPAA to conduct National Level Coding contest and state level STEP event during 2020
- 30. Received funding from Sri Sairam Engineering College Management and Partial funding from IEEE Madras Section for presenting my research work "Investigating the Performance of Machine Learning Algorithms for Improving Fault Tolerance for Large Scale Workflow Applications in Cloud Computing." In 2019 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE), at Amity University .Dubai.
- 31. Received Top Performer award for the year 2019-2020 from SRI SAIRAM ENGINEERING COLLEGE Management
- 32. Team Leader for the Leelavathy Award under "Women in Literacy "category submitted on 31.12.2020
- 33. Received 300 USD from IEEE Computer Society, Newyork during 2018 to conduct the activities of IEEE computer society-SBC, Sri Sai Ram Engg College.
- 34. Mentor for the Project "Wearable Device for Blinds-Guide to Pick Surrounding Objects" which won Third Prize in National Level Buoyanci Product Innovation Challenge 15-10-2018
- 35. NPTEL Top 1% Scorer in "Cloud Computing" Course for April 2017 Examination

- 36. Guided UG Project titled "A Novel Approach for Early Flood Warning "which was awarded Best Project in Project exhibition 2017
- 37. Established IEEE Computer Society SBC,,Sri Sai Ram Engineering College and Advisor for IEEE-CS SBC from Feb 2017
- 38. Won the best paper award for "An Integrated Scheduling and Resource Allocation Framework for Workflow Applications in IaaS clouds" at International Conference on Pattern Recognition and Multimedia Signal processing AnnamalaiUniversity, Chidambaram on 9-10, Jan, 2015.
- 39. Editor for Proceedings of IEEE International Conference on Computing and Communications Technologies (ICCCT), 2015 and 2019 organized by Department of Information Technology, SriSai Ram Engg College
- 40. Mentor for the project "Regulating Bus Management System Using Cloud Platform" which has secured Top 10 position in the Innovate-UMO global Student innovation challenge, held at IIIT, Hyderbad conducted during Oct 17-19,2013.
- 41. Produced 100% results in for various subjects in Anna University Semester Examinations

# **Research Competency and Contributions:**

# **Publications in SCI Journals (6)**

- 1. Wei-Yan Chang1, **Prathibha Soma2**, Huan Chen1\*, Hsuan Chang3, Chun-Wei TsaiA "Hybrid Firefly with Dynamic Multi-swarm Particle Swarm Optimization for WSN Deployment", Journal of Internet Technology Vol. 24 No. 4, July 2023 pp 825-836 DOI: 10.53106/160792642023072404001,ISSN 1607-9264 e-ISSN 2079-4029
- 2. **Soma Prathibha,** Deepak Dahiya, C. R. Rene Robin, Cherukuru Venkata Nishkala4 and S. Swedha,"A Novel Technique for Detecting Various Thyroid Diseases Using Deep Learning",Intelligent Automatation and Soft computing, Vol.35.No.1, pp. (2023) DOI: 10.32604/iasc.2023.025819 Tech Science Publisher(SCI Indexed)
- 3. **Soma Prathibha,** Latha, B. & Vijaykumar, V. "An Improved Multi-Objective Workflow Scheduling Using F-NSPSO with Fuzzy Rules". Wireless Personal Commun (2022). Vol.124,Issue No 4,PP.3567-3589 <a href="https://doi.org/10.1007/s11277-022-09526-z,Available">https://doi.org/10.1007/s11277-022-09526-z,Available</a> online(SCI Indexed) **0929-6212**
- 4. Soma Prathibha and B.Latha "Response Surface Modelling for Performance Analysis of Scientific Workflow Application in Cloud" Cluster Computing, EISSN:1573-7543, Published online Sept 1,2020, Impact factor 3.458 (2019) (SCI, Scopus and UGC-CARE list) DOI: https://doi.org/10.1007/s10586-020-03180-5
- **5. Soma Prathibha,**Dr.B.Latha and Dr.G.Sumathi "Particle swarm optimization based workflow scheduling for medical applications in cloud." Biomedical Research ISSN: 0970-938X (Print) | 0976-1683 (Electronic) ,ALLIED ACADEMIES(Scopus Indexed and SCI indexed Impact Factor=0.226)
- 6. **Soma Prathibha,**Dr.B.Latha and Dr.G.Sumathi " An Improved Multi-Objective Optimization For Workflow Scheduling In Cloud Platform" has been accepted for

publication in Journal of Internet Technology, for May 2017 Issue ISSN: 1607-9264, E-ISSN: 2079-4029 (Anna University Annexxure-I, SCI indexed Impact Factor= 0.579) DOI=10.6138%2 f JIT. 2017.18.3.20161101

# **Scopus Indexed Journals and Conferences**

# **International Journals (9)**

- 1. Soma Prathibha, Vivekanandan G, Rupali S Kamathe, Hanchate Vandana Vijaykumar, G. Bhuvaneswari, G. Manikandan, G. Sabarinathan, Mustafa Nawaz S M, "Reef Vista: Deep Learning-Powered Underwater Coral Reef Monitoring" is published in Tuijin Jishu/Journal of Propulsion Technology ISSN: 1001-4055 Vol. 45 No. 3 (2024)
- Soma Prathibha, K.R. Sharadha, Jyothika & Dharshini, "Tongue Diagnosis using CNN for Disease Prediction" International Conference in Recent Development in Electronics and Communication Systems (RDCES), organized by Adithya College of Engineering on July 22-23, 2022. Paper is published in International Journal of Electrical and Electronics Research (IJEER) , volume 10, issue 4, pp 817-821, published in 18-10-2022, E-ISSN 2347-470X, Forex Publisher, DOI: <a href="https://doi.org/10.37391/IJEER.100409">https://doi.org/10.37391/IJEER.100409</a>
   Website: <a href="https://ijeer.forexjournal.co.in/archive/volume-10/ijeer-100409.html">https://ijeer.forexjournal.co.in/archive/volume-10/ijeer-100409.html</a> (Scopus Indexed)
- 3. **Soma Prathibha**,Dr.B.Latha and Dr.G.Sumathi " A novel data aware task clustering mechanism for scientific workflow applications in cloud" International Journal of Internet Technology and secured transactions, ISSN: 1748-569X (Print) | 1748-5703 (Electronic), Vol 9,No 3,2019 , pp.260–281,InderScience(Scopus Indexed) DOI https://doi.org/10.1504/iiitst.2019.101825
- **4. Soma Prathibha,** Sreeram G,and VenkataTirumalaBabu "Smart Black-Box System", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD),ISSN (P): 2249-6890; ISSN (E): 2249-8001,Vol. 8, Special Issue 3, Dec 2018, 1023-1032, © TJPRC Pvt. Ltd (Scopus Indexed)
- **5.** D.A.**Prathibha**, Dr.B.Latha and Dr.G.Sumathi "Improving Energy Efficiency using DVFS in Cloud Computing for Workflow Applications"- International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.75 (2015).(scopus)
- 6. **D.A.Prathibha,**Dr.B.Latha and Dr.G.Sumathi "An Integrated Scheduling and Resource Allocation Framework for Workflow Applications in IaaS clouds"- International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.75 (2015).(Scopus)
- **7. D.A.Prathibha,** Dr.B.Latha and Dr.G.Sumathi (2015) "Monitoring Workflow Applications execution with different resource types in cloud environment "Australian Journal of Basic and Applied Sciences, ISSN:1991-8178, 9(6) Special 2015, Pages: 1-4.(Scopus)

- **8. D.A.Prathibha,** Dr.B.Latha and Dr.G,.Sumathi "Efficient Scheduling Of Workflow In Cloud Environment Using Billing Model Aware Task Clustering "-Journal of Theoretical and Applied Information Technology ISSN: 1992-8645 E-ISSN: 1817-3195 31st July 2014. Vol. 65 No.3(Scopus)
- **9. Soma Prathibha,** S. Sowvarnica, Dr.B.Latha and Dr.G.Sumathi "A Comparative study of task and fault tolerance clustering techniques for scientific workflow applications in cloud platform" Springer Communications in Computer and Information Science Series, springerverilag (ISSN:1865-0929,Annexure-II,Ver 2016.2) (Scopus) DOI https://doi.org/10.1007/978-981-10-8603-8 1

### **International Conferences(30)**

- 1. R.Vijayalakshmi and **SomaPrathibha** "A novel approach for task scheduling in cloud" Fourth IEEE International Conference on Computing, Communications and Networking Technologies, organized by Vivekanandha College of Engineering for Women, Tiruchengode, July 4-6,2013. published in IEEE explorer(Scopus)(full paper)
- 2. DurgaPriya.G and **SomaPrathibha** "Assuring correctness for outsourced data repository in cloud environment", Proc, International conference on Advanced Communication control and Computing Technologies(IACCCT), May 8-10,2014, Organized by Syed Ammal Engineering College , Ramanathapuram, Tamilnadu, India. Published in IEEE explorer (ISBN No. 978-1-4799-3914-5/14/\$31.00 © 2014 IEEE) (**Scopus**) **DOI** 10.1109/ICACCCT.2014.7019407
- 3. Nivethamani.M and **SomaPrathibha** "Energy trading spectrum using Power Re-distribution in wireless sensor networks" in IEEE2015 International Conference on Computing and Communications Technologies (ICCCT), 26-27 Feb 2015,organized by Department of Information Technology,SriSai Ram Engineering College,Chennai.Published in IEEE explore Digital library DOI 10.1109/ICCCT2.2015.7292730(**Scopus**)
- **4. Soma Prathibha,** Dr.B.Latha and Dr.G.Sumathi "Improving Energy Efficiency Of Computing Servers And Communication Fabric In Cloud Data Centres" at International Conference on Research in Computational Intelligence and Communication Networks, September 23-25, 2016,kolkata. DOI 10.1109/ICRCICN.2016.7813544Proceedings available in IEEE Xplore(Scopus)
- 5. Soma Prathibha, S. Sowvarnica ,Dr.B.Latha and Dr.G.Sumathi "A Comparative study of task and fault tolerance clustering techniques for scientific workflow applications in cloud platform" has been accepted for International Conference on Data Science Analytics and Applications (DaSAA 2016) conducted by Department of computer science and Engineering,AnnaUniversity,Chennai.(Scopus)
- SarikaS, JayashreeS, Solai A L, Soma Prathibha" A Novel Approach For Early Flood Warning Using Android And IOT" IEEE International Conference on Computing and Communications Technologies (ICCCT), 23-24 Feb 2017, organized by Department of Information Technology, SriSai Ram Engineering College, Chennai. Proceedings Published in IEEE explore Digitallibrary <a href="https://ieeexplore.ieee.org/abstract/document/7972302">https://ieeexplore.ieee.org/abstract/document/7972302</a>, DOI: 10.1109/ICCCT2.2017.7972302 (Scopus)
- 7. Soma Prathibha, S. Sowvarnica Survey of Failures and Fault Tolerance in Cloud IEEE International Conference on Computing and Communications Technologies (ICCCT), 23-24 Feb 2017,organized by Department of Information Technology, SriSai Ram Engineering College,Chennai. ProceedingsPublished in IEEE explore Digital library https://ieeexplore.ieee.org/document/7972271DOI: 10.1109/ICCCT2.2017.7972271(Scopus Indexed)
- 8. S.Pavithra, S.Ramya and **Soma Prathibha** "A Survey on Cloud Security Issues and Blockchain" IEEE Third International Conference on Computing and Communications Technologies (ICCCT), 21-22 Feb 2019, organized by Department of Information Technology, SriSai Ram Engineering

- College, Chennai, pp. 136-140. IEEE, 2019. DOI: <u>10.1109/ICCCT2.2019.8824891(Scopus Indexed)(Scopus)</u>
- Soma Prathibha. "Investigating the Performance of Machine Learning Algorithms for Improving Fault Tolerance for Large Scale Workflow Applications in Cloud Computing." In 2019 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE), pp. 187-190. IEEE, 2019. (Received Partial Funding from IEEE Madras Section Scopus Indexed)(Scopus) 10.1109/ICCIKE47802.2019.9004379
- Muhseen, Zynab, Varsha Sundar, Manimegalai Balakrishnan, Vaishali Ravi, Soma Prathibha, Divya Ganesh, and Mithileysh Sathiyanarayanan. "Portable Smart Solar Panel for Consumer Electronics."
   In 2020 International Conference on Smart Technologies in Computing, Electrical and Electronics (ICSTCEE), pp. 494-499. IEEE, 2020.(Available in IEEExplore 10.1109/ICSTCEE49637.2020.9277123)(Scopus)
- 11. Sowmya V.R,Karthika A and **Soma Prathibh**a presented Technical Paper on "Smart Mobile Application for Water supply Management in urban cities" in 2021 International Conference on Computer Communications and Informatics held from 27-29 Jan 2021 organized by Sri Shakthi Institute of Engineering and Technology DOI https://doi.org/10.1109/ICCCI50826.2021.9402323
- 12. Afreen Sana H**,Soma Prathibh**a,Praveen Kumar P,Shabika Fathima M,Yashwant Krishnan B, "Design of a Comprehensive Sensor based Soil and Crop Analysis System Model using Machine Learning Algorithms," *2021 4th International Conference on Recent Developments in Control, Automation & Power Engineering (RDCAPE), 2021, pp. 327-332, doi: 10.1109/RDCAPE52977.2021.9633648.*
- 13. 24.K. R. Saradha, **Soma Prathibha**,M. R. Sivakumar and N. B. S. A. Sandeep, "Collaborative Web Search Using Group Conceptual Index," 2021 4th International Conference on Computing and Communications Technologies (ICCCT), 2021, pp. 552-554, doi: 10.1109/ICCCT53315.2021.9711771.(<a href="https://ieeexplore.ieee.org/document/9711771">https://ieeexplore.ieee.org/document/9711771</a>, Scopus Indexed)
- R. Priyadharshini, S. J. Srinithi Samyuktha, G. Shamini, S. A. Jebamani, Soma Prathibha and R. Punitha, "GSM Based Climate and Irrigation Monitoring System," 2021 4th International Conference on Computing and Communications Technologies (ICCCT), 2021, pp. 560-563, doi: 10.1109/ICCCT53315.2021.9711866.(https://ieeexplore.ieee.org/document/9711866
- 15. Soma Prathibha, Bhavana R, K. L. Nirmal Raja, Kirthiga M, Shyamkumar M and Anitha Jebamani, "Navigating Alert for Visually Impaired Using Computer Vision Aided System," 2021 4th International Conference on Computing and Communications Technologies (ICCCT), 2021, pp. 564-569, doi: 10.1109/ICCCT53315.2021.9711816.(<a href="https://ieeexplore.ieee.org/document/9711816">https://ieeexplore.ieee.org/document/9711816</a>, Scopus Indexed)
- 16. **Soma Prathibha**,K.R.Saradha,Rakesh Kumar,Sneha Jaiswal,"Attentive Amigo \_ Student's alertness indicator app",IEEE International Conference on Communication,Computing and IoT,Organized by Department of ECE,Sri Sairam Engineering College,Chennai on March 10th-11,2022 (<a href="https://ieeexplore.ieee.org/document/9767926">https://ieeexplore.ieee.org/document/9767926</a>)(Scopus Indexed)
- 17. **Soma Prathibha**; Swagata Sarkar; Zynab M; Harini R; Shyam Kumar M; Vibha V; Keerthana Sathish "Synthesizing Data Analytics towards Intelligent Enterprises," 2022 International Conference on Advanced Computing Technologies and Applications (ICACTA), 2022, pp. 1-6, doi: 10.1109/ICACTA54488.2022.9753427.(https://ieeexplore.ieee.org/document/9753427)(Scop us Indexed)
- 18. **Soma Prathibha**; J Bino; Tabil Ahammed; Chinmoy Das; Shariar Rahman Oion; Sudipto Ghosh; Maharin Afroj "Detection Methods for Software Defined Networking Intrusions (SDN)," 2022 International Conference on Advances in Computing, Communication and

- Applied Informatics (ACCAI), 2022, pp. 1-6, doi: 10.1109/ACCAI53970.2022.9752574.https://ieeexplore.ieee.org/document/9752574 (Scopus Indexed)
- 19. A. Kabir, T. Ahammed, C. Das, M. H. Kaium, A. Zardar and **S. Prathibha**, "Light Fidelity (Li-Fi) based Indoor Communication System," 2022 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), 2022, pp. 1-5, doi: 10.1109/ACCAI53970.2022.9752567.(https://ieeexplore.ieee.org/document/9752567)(Scopu s Indexed)
- 20. Md. Tabil Ahammed; Sabbir Hossain; K. Vijayakumar; Chinmoy Das; Shariar Hossain Shohan; Soma Prathibha,"Applied Informatics in Renewable Energy Grid with Dynamic Reactive Power Configuration Based on a Probability Assessment of Transient," 2022 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), 2022, pp. 1-6, doi: 10.1109/ACCAI53970.2022.9752520.(https://ieeexplore.ieee.org/document/9752520) (Scopus Indexed)
- 21. Md. Tabil Ahammed; Chinmoy Das; Zayed Mohammad; Md. Sumon Hasan; Sadia Fatema Moula; Soma Prathibha; Khandakar Tasfia Reza and Tanbir Hasan Bhuiyan "Big Data Analysis for E-Trading System," 2022 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), 2022, pp. 1-4, doi: 10.1109/ACCAI53970.2022.9752539. (https://ieeexplore.ieee.org/document/9752539) (Scopu s Indexed)
- 22. **Soma Prthibha,** Shyamkumar M; Kirthiga M; Srinithi S; Yashwanth Krishnan B; Pravin Kumar P; Shabika Fathima Met al., "TELEFIT An IoT enabled health care Device," 2022 International Conference on Electronic Systems and Intelligent Computing (ICESIC), April, 2022, pp. 157-161, (doi: 10.1109/ICESIC53714.2022.9783557).
- 23. **Soma Prthibha** K. R. Saradha, P. Sharmila and S. Kaveya, "AI and Web Application in Medicine Delivery Drones," 2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC), 2022, pp. 48-53, doi: 10.1109/ICAAIC53929.2022.9792902.
- 24. **Soma Prathibha,**Shamini, Kaajal Krishnamurthy, Vignesh, Maheswari A,"AI-Assisted Farming For Crop Recommendation and Virtual Assistance "IEEE Technically Sponsored INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE AND TECHNOLOGY 2022 (ICCST 2022) on November 9th & 10th 2022.Published in IEEE EXplore on (10.1109/ICCST55948.2022.10040463)
- 25. **Soma Prathibha,**K.R.Sharadha,ShyamKumar.M, M.R.Bharathkumar,Arthi.P, "ULTRA-MODERN WALKING STICK DESIGNED FOR THE BLIND" IEEE International Conference on Networking and Communications 2023 organized by SRMIST on 5th and 6th April 2023,published in IEEExplore 2023
- 26. **Soma Prathibha**, V. Saiganesh and S. Lokesh, "Survey on Prevention of DDoS Using Blockchain," 2023 5th International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, India, 2023, pp. 1246-1253, doi: 10.1109/ICIRCA57980.2023.10220655.(IEEE XPLORE 2023, Scopus)
- **27. Soma Prathibha,** K. Krishnamurthy, S. Krishnamurthy and J. S, "Crack Detection for Metal Surfaces Using Deep Learning Model," 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India, 2023, pp. 1-6, doi: 10.1109/ICCEBS58601.2023.10449252.
- 28. **Soma Prathibha**, Dharshini S, G. Sharmini and U. Rusitha, "Careex an AI Assisted Career Guidance and Eligibility Prediction System", 2023 Intelligent Computing and Control for

- Engineering and Business Systems (ICCEBS), Chennai, India, 2023, DOI: 10.1109/ICCEBS58601.2023.10448609
- 29. **Soma Prathibha**, S. Siva Chandran, M. Kirthiga, K. Dhanya, S. Abhijay Gopal and M. Manish, "Design and Implementation of Solar Electrification Station for Sustainable Energy Access," *2024 International Conference on Communication, Computing and Internet of Things (IC3IoT)*, Chennai, India, 2024, pp. 1-6, doi: 10.1109/IC3IoT60841.2024.10550242.
- 30. Soma. Prathibha, V. B. Priyaa, D. D. Sri and R. S. Nandhini, "A Survey on Leveraging Technology for Domestic Violence Survivors," 2024 International Conference on Power, Energy, Control and Transmission Systems (ICPECTS), Chennai, India, 2024, pp. 1-5, doi: 10.1109/ICPECTS62210.2024.10780215.[https://ieeexplore.ieee.org/document/10780215]
- 31. Soma Prathibha, Avinash .R and Balaji "Decentralized Donation And Fundraising Application" IEEE TECHNICALLY CO-SPONSORED INTERNATIONAL CONFERENCE ON COMMUNICATION, COMPUTING, SMART MATERIALS & DEVICES (ICCCSMD 2024)19th and 20th Dec 2024,, College of Engineering Guindy, Anna University (YEt to be published)

## **Book Chapter(4)**

1. Soma Prathibha,K.Palanikumar,A.Ponshanmughakumar and M.Rakesh kumar(2024) "Applications of augmented reality and virtual reality technologies on maintenance and repair of automobile and mechnaical equipment " in book titled "Machine intelligence in mechanical engineering ,published by Elseiver(Available online https://www.sciencedirect.com/science/article/abs/pii/B9780443186448000010)

DOI:https://doi.org/10.1016/B978-0-443-18644-8.00001-0,In Woodhead Publishing Reviews: Mechanical Engineering Series,Machine Intelligence in Mechanical Engineering,Academic Press,2024,Pages 63-89,,ISBN 9780443186448,https://doi.org/10.1016/B978-0-443-18644-8.00001-0.

- **2. Prathibha, S.**, Saiganesh, V., Lokesh, S., Maheshwari, A., Kishore, M.A. (2024). Propertian: Decentralized Property Management System. In: Tiwari, S., Trivedi, M.C., Kolhe, M.L., Singh, B.K. (eds) Advances in Data and Information Sciences. ICDIS 2023. Lecture Notes in Networks and Systems, vol 796. Springer, Singapore. https://doi.org/10.1007/978-981-99-6906-7\_30
- **3. Prathibha Soma**., Nirmal Raja K.L., Shyamkumar M., Kirthiga M. (2022) COVID-19 Safe Guard: A Smart Mobile Application to Address Corona Pandemic. In: Nanda P., Verma V.K., Srivastava S., Gupta R.K., Mazumdar A.P. (eds) Data Engineering for Smart Systems. Lecture Notes in Networks and Systems, vol 238. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-2641-8\_54(ISBN 978-981-16-26401-1">https://doi.org/10.1007/978-981-16-2641-8\_54(ISBN 978-981-16-26401-1</a>)
- Soma Prathibha, T.R. Sona and J.Krishna Priya "Secured Storage and Verification of Documents Using Blockchain Technology", In: Agrawal R., Gupta N. (eds) Transforming Cybersecurity Solutions using Blockchain. Blockchain Technologies. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-33-6858-3">https://doi.org/10.1007/978-981-33-6858-3</a> 5978-981-33-6857-6

1.Published Book title "Future Perspectives in Data Analytics and IOT" Jan 2024,IIP International ISBN:978-93-5747-559-4,Number of pages:109.Publishers Available Online: https://www.amazon.in/dp/9357475591?ref=myi\_title\_dp,https://www.flipkart.com/product/p/it me?pid=9789357475594,https://store.iipbooks.com/book/future-perspectives-in-data-analytics-a nd-iot/

### **UGC Indexed Journal (5)**

- Akshaya B, Soma Prathibha, Priyavarshini Devi S, "Concare A Teleconsultation System Using IoT in Healthcare", International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), ISSN: 2456-3307, Volume 8, Issue 3, pp.185-190, May-June-2022. Available at doi: https://doi.org/10.32628/CSEIT228355 (UGC Indexed) Journal URL: https://ijsrcseit.com/CSEIT228355
- Soma Prathibha, Ms K.R. Sarada, Ms. S. Anitha Jebamani, Shakthi R, Sindhuja V, Roshna N, Foot Ulcer For Diabetic Patients' Assessment System, Ilkogretim Online Elementary Education Online, 2020; Vol 19 (Issue 2): pp. 1882-1887, doi: 10.17051/ilkonline.2020.02.696772(UGC Care List) DOI 10.1109/IC3IOT53935.2022.9767922
- 3. **Soma Prathibha**, Dharini V K, Anupama Jeyashree S, Dwaraknath K, Parvathi Priya Nandana K M,ShyamKumar M "AUTOMATED SANITIZER DISPENSER UNIT WITH FACEMASK VENDOR" Dogo Rangsang Research Journal, ISSN: 2347-7180,Vol-11 Issue-09 No. 01 September 2021, **UGC Care Group I Journal**
- 4. **Soma Prathibha,** Akshaya J,Preethi "AI DIET CONSULTANT MANAGEMENT SYSTEM" International Journal of Creative Research Thoughts (IJCRT), ISSN: 2320-2882, Volume 9, Issue 4 April 2021 (UGC)
- 5. **Soma Prathibha,**Cherukuru Venkata Nishkala and S.Swedha "Improving Decision Making in Sports using IoT",Journal of the Gujarat Research Society,ISSN 0374-8588,Vol 21,Issue 17,Dec 2019 pp.1826-1833.(UGC)

#### **Other Publications**

#### **International Journals (10)**

1. Soma Prathibha, Jothika. S and Darshini S "Mental Heal Tracker for dumb using sign language", Journal of current research in science and engineering, PP-1, Vol 6, Issue 2 ISSN:2581-611x August 2023

- Soma Prathibha, Kavya S, Sharmila P, Keerthan and Uthra "Innovati on of Applicati on for Central manage ment for E-comm erce network", nternational Journal of Science and Innovative Engineering & Technology, Volume 4, September 2023, ISBN 978-81-923607-3-7
- 3. **Soma Prathibha,** R.Priyadarshini and L.Kavipriya "Plant Disease Detection using Deep Learning and Convolutional Neural Network " Journal of critical Review ISSN-2394-5125VOL 7, ISSUE 14, 2020(Front sheet
- 4. **Soma Prathibha**, J.Akshaya and Sahil Ram "Emergency Medical Dispenser Test Engineering and Management" ISSN: 0193 4120April-May issue 2020
- 5. **Soma Prathibha**, PavithraLakshmi.S.P,N.MankalaSwetha,Vanmathi and T.P.Rani "VISION VIA VIBRATION-A wearable device for the visually impaired Guides the blind to pick the objects" International Journal of Advance Research, Ideas and Innovations in Technology2454-132XVol 6,No 1,2020, pp.136-138 Jan 2020
- 6. **D.A.Prathibha**, Dr.B.Latha and Dr.G.Sumathi"An Enhanced Weighted-Multi-objective PSO for Workflow Application Scheduling in Cloud Platform " Asian Journal of Research in Social Science and Humanities, Vol. 6, No. 10, October 2016, pp. 2143-2152 (ISSN 2249-7315).(request link)
- 7. DurgaPriya.G and **Soma Prathibha** "Insuring Security for Outsourced Data Stored in Cloud Environment"- International Journal of Computer Applications Technology and Research, Volume 3 –Issue 2, 100 -104,,Feb. 2014. 10.7753/IJCATR0302.1003(2319–8656 (Online)
- 8. **D.A.Prathibha,** Dr.B.Latha and Dr.G,.Sumathi "Issues in Adapting Cluster,Grids and Cloud for HPC applications "-International Journal of conceptions on computing and Information Technology,Vol 2,Issue.1,Jan 2014,ISSN:2345-9808
- 9. Vijayalakshmi.R, **Soma Prathibha** "Efficient two level scheduling in cloud computing "-International Journal of Management, IT and Enginnering, Vol:3, Issue:5, October 2013.pp 433-444. ISSN:2249-0558.
- 10. **RanjithRamesh,** YokeshEzhilarasu, PrasannaRavichandran and Soma Prathibha, "Regulating Bus Management System Using Cloud Platform" -International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 2, No. 6, December 2012 pp 517-520. DOI: 10.7763/IJEEEE.2012.V2.175

# National journal (3)

- 1. Soma Prathibha "Novel Window Adjustment Scheme for XCP"- Indian Journal of Computing Technology IROFISVol 2 Issue 2 ,ISSN:0973-5127 Nov 2007 Pages:34-39
- 2. Soma Prathibha, "Performance Enhancement for DSR Protocol using Adaptive Distributed cache updation In MANET"- SSEC Tech journal 2008 Vol 7 2008 Pages 53-56.
- 3. Soma Prathibha, Cherukuru Venkata Nishkala & Sivapriya. P "Flash Flood Alert Management Systen" SSEC Tech Journal 2019 Vol 7 2008 Pages 53-56.

### **Other International Conferences(10)**

1. **D.A.Prathibha**,R.Ranjana and Dr.B.Latha "Moving the IT services of Educational Institution to Cloud Environment:Issues and Implications" in International Conference

- organized by Sri Sai Ram Institute of Management Studies in association with Asian Management Science Association during 22-9-2011 & 23-9-2011.
- 2. RanjithRamesh, YokeshEzhilarasu, PrasannaRavichandran and **Soma Prathibha** "Regulating Bus Management System Using Cloud Platform" in International Conference in E-Education,E-Business,E-Management and E-Learning organized by IACSIT on 19-1-2013 and 20.1.2013 at Dubai.
- 3. RamyaRavishankar, SanthoshiSubrahmanyam and SomaPrathibha "An Authentication Mechanism Based on Behavioral Biometry" at the International Conference on Advanced Computer Science and Information Technology(ICACSIT) held at Chennai on 10th March,2013
- 4. S.TwinklePreethy, P.H.Deepa, K.Sowmya and Soma Prathibha "An Interactive Evolution Merging Families with Incompetent Childern Against Intellectuals" In proceedings of the International Conference on Computing, Communication and Advanced Network-ICCCAN 2013.
- 5. Cost Effective Resourse Sharing Techniques for Storage Application : Using SaaS and IaaS Services R.Koushalya and Ms.Soma Prathibha ICCSP'13
- 6. D.A.Prathibha, Dr.B.Latha and Dr.G, Sumathi "Issues in Adapting Cluster, Grids and Cloud for HPC applications "at the International conference on Mathematics And Information Technology ICMIT organized by WAIRCO held on 15-16, March 2013 at Chennai, India
- 7. **D.A.Prathibha** ,DrB.Latha and Dr.G.Sumathi . "An Integrated Scheduling and Resource Allocation Framework for Workflow Applications in IaaS clouds" in International Conference on Pattern Recognition and Multimedia Signal processing ,AnnamalaiUniversity,Chidambaram on 9-10,Jan,2015.
- **8. D.A.Prathibha,** Dr.B.Latha and Dr.G.Sumathi "Improving Energy Efficiency using DVFS in Cloud Computing for Workflow Applications"- International Conference on Computing and Information technology(ICCIT'15)13-14, August 2015 organized by Sri Sai Ram Institute of Technology, Chennai.
- 9. **Soma Prathibha**,T.R.Sona and J.Krishna Priya "Document and Certificate verification using block chain technology",Proceedings of the 6th international conference on Electrical Energy Systems,Page No.102 organized by Department of Electrical and Electronics Engg,SSN Engg College onFeb 20-21,2020
- 10. Soma Prathibha and R.Kathik"Game Management in Tennis Score PRedicition system for Tennis" in International Conference in Engineering and Applied Tecchnology, Virtual Conference organized by CPET, Chennai on 15-16, August 2020

### National Conferences

## National conference (18)

- 1. Soma Prathibha ,"Recent techniques in Biometrics" in National Conference on Information and Communication Technology organized by CCIET, Wadhwan city on 27-03-2005.
- 2. Soma Prathibha and R.Ranjana ,"Study of Challenges faced in extending internet "QOS to mobile IP" in National conference on Recent trends in Information Technology(NCRTIT)organized by Department of InforantionTechnology, Kamaraj College of Engg, Virudhnagar on 05-04-2006.
- 3. Soma Prathibha and R.Ranjana, "Novel Window Adjustment for XCP Congestion Control" in National conference on Research Opportunities And Challenges In "IT"

- organized by Dept of Master of Computer Applications, SriSairam Engg college on 04-04-2007.
- 4. Soma Prathibha ,"Performace Enhancement for DSR protocol using dynamic caching for MANET"in National Conference organized by MeenakshiSundararajanEnggCollege,Chennai on 05-03-2008.
- 5. Soma Prathibha, "Impact of Dynamic Caching on the performance of DSR protocol in MANET" in National Conference On Informatics organized by Narayana EnggCollege, Nellore on 27-12-2008.
- **6. Soma Prathibha** ,R,Ranjana&P.Yogeeskumar, "Impact of Security issues in Adapting Cloud Computing" in 2nd National conference on Information and software Engineering(NISE) organized by AarupadaiVeedu Institute of Technology, Vinayaka Missions University, Chennai and Sponsored by IEEE Computer Society Madras Chapter on Feb 26-27, 2010.
- 7. M.SruthiLakshmi, G.Gayathri, Subhashini, Soma Prathibha "Yathri Mithra, Traffic monitoring and Accidents alerting with security systems for vehicles" in National conference on Emerging trends in computer applications and management (NCETCAM'11) organized by Faculty of computer applications and Faculty of Management studies at Aarupadi Veedu Institute of Technology, Vinayaga Missions University on 30th and 31st March 2011.
- 8. **D.Jayanthi,**T.V.ShanmugaPriya,S.Srimathi and Soma Prathibha, "Efficient Parallel Processing in Cloud" Proc.National Level conference on Computing Technology organized by Department of CSE and IT, Rover Engineering college in March'2012.
- 9. **Rukesh.J,** Sabarinathan.R, VenkatBalaji and Somaprathibha" Sharebook:A Vision for Socially Motivated Resource Sharing" Proc. National Conference on Emerging Trends In Computer Science and Bio Informatics ETCSBI'12 organized by School of Computing sciences VELS University, March 2012.
- 10. R.Vijayalakshmi, Subhashini Suresh, M.Krishna PRiya and Soma Prathibha "PSO based scheduling of Resources in cloud Environment "Proc. National Conference on challenges and issues in computing and technology, organized by VELTECH University, 14-15 March, 2014.
- 11. **SomaPrathibha,**ADhivya,K.Mahadevi and M.Goppurendevi"Truthful Skewness Mechanisms For Dynamic Virtual Machine Provisioning And Allocation" Proc.National Conference on Cutting Edge Technologies in Computing & Bioinformatics (NCCETICB'16) on 24-03-2016 organized by the Department of Computer Science and Engineering,SriRam Engineering College,Chennai.
- 12. Soma Prathibha and Sumitha A.T "Recent Techniques for Improving Energy Efficiency in cloud : A Survey" Proc. National Conference on Recent Trends in Computing and Technology NCRTCT'16 on 29th April, 2016 organized by department of information Technology, SriSai Ram Engineering college, Chennai
- 13. **Soma Prathibha**, PriyankaSekar,SaiShruthi and Suthandira "Innovative Smart Transportation based on integration of IOT and Cloud " Proc.National Conference on Recent Trends in Computing and Technology NCRTCT'16 on 29th April, 2016 organized by department of information Technology,SriSai Ram Engineering college,Chennai
- 14. Soma Prathibha, Sivapriya P, Kreethika "Robotics and Automation in construction industry" Proc. National Conference on Recent Trends in Computing and Technology

- NCRTCT'16 on 29th April, 2016 organized by department of information Technology, SriSai Ram Engineering college, Chennai
- 15. Cherukuru Venkata Nishkala, **Soma Prathibha** and Siva Priya. P "An Intelligent Flash Flood management system using crowd sourcing", Proc. National conference on Smart Innovations in Communication and Computing, 5th March 2019, Organized by Department of Computer science and Engg, SriSai Ram EnggCollege, Chennai
- 16. **Soma Prathibha**,S.Keerthana and Uthra "Image Dehazing and Visibility Improvement using Dark Channel Prier and Guided Filter" in 5th National Conference on Information and Communication Engineering on 22nd April 2022 organized by Department of Computer Science and Engineering,Sri Sairam Institute of Technology,Chennai.
- 17. Soma Prathibha, G. Shamini and Rusitha, "A SURVEY ON CAREER GUIDANCE ISSUES AND MACHINE LEARNING MODELS" in the 8th National Conference on Recent Trends in ABCD (ICON'23) organized by the Department of Information Technology at Dr. M. G. R. Educational and Research Institute, Chennai-95. On 23.03.2023 & 24.03.2023
- 18. KEERTHANA K, UTHRA R, Dr. SOMA PRATHIBHA ,"Underwater Image Enhancement for Coral Reef Monitoring Using Deep Learning Technique in NATIONAL CONFERENCE ON COMPUTATIONAL INTELLIGENCE AND DATA ANALYTICS CIDA 2023 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, Hindustan University on March 30th -31th 2023

# **Publication Summary**

S.No	Publication Detail	Count
1	SCI Jounral	6
2	Scopus Journal	9
3.	Scopus Conference	30
	Scopus Book Chapter	03
4	UGC Journal	05
5	National Journal	03
6	Othere International Conference	10
7	Other National Conferences	18
8	Other Book Chapters	01

# Total Publications:85, Scopus Publications:48

# **Patents**

- File Patent for "A Blockchain driven collaborative defense system DDOSCHAIN for Dynamic DDOS Prevention/(Application number 202441072564
- Filed Patent for "MEDIPROMPT-AN APPLICATION FOR THE TIMELY DETECTION OF IRON DEFICIENCY", Application number No.202241076692.Current status of application is Published.
- Filed Patent for "A Foldable Electric Vehicle" on 20.10.2021 Application number: 351533-001. Granted on 10.01.2023.
- Patent Granted for the research work"Novel System for Early Flood Warning", Application number 2017141025771 and Patent number 440294

# **Funded Project**

Web Development for SRays Solutions, Chennai from 25.04.2022 to 25.06.2022 with funding of 32,500/-

#### **IEEE**

### Consultancy

Recieved the Honorium from NPTEL for translation work for the course Introduction to Industry 4.0 and Industrial IOT

#### **Invited Talks & Session Chair**

- 1. Invited as Resource Person for 6 Days
- 2. Invited as Expert Speaker for the **Expert Forum on Humanitarian Projects in Action Transforming Lives,One Step at a Time** at All India Student young professional ,Women in Engineering and Life member Congress held on 07-12-2024 at College of Engineering Anna University.
- 3. Session Chair and TPC member for IEEE WIECON 2024, held on 06-12-2024 and 07-12-2024 organized by IEEE Bangladesh Section and Madras Section at College of Engineering, Guindy, Anna University
- 4. Invited as guest speaker for live webinar on the topic Third Generation in Neural Networks by IEEE Student Branch, College of Engineering and Technology, University of Technology and Applied Sciences, Salalah on Nov 12,2024.
- 5. Judge for the Grand Final of the IEEE Robotics and Automation Project Showcase—Unleashing the Innovation, taking place on **October 18, 2024**, at Kalasalingam Academy of Research and Education
- 6. Session Chair for IEEE International Conference ICPECTS 2024,Organized by EEE Dept,Sri Sairam Engineering College

- 7. Organizing Committee member and Panel Moderator for International Leadership Summit,2024 organized by IEEE WIE Madras Section from 3-5th October,2024 at Anna University,Chennai
- 8. Selected as Mentor for IEEE India Council Professional Mentoring Program 2024
- 9. Invited as jury member for "IEEE CIS spax event " Quintessence Nexus 1.0" as judge for 27th August 2024 and 28th August 2024, at smart classroom 1, E block 3rd floor, Sri Sairam Engineering College..
- 10. Invited as speaker to delivery lecture on **Third Generation Neural Networks** for IEEE Computer Society Annual Symposium (CSIS) organized by SRM university on 31.07.2024
- 11. Invited as speaker for **IEEE MAS SIGHT AG's Coffee Chat Ser**ies conducted on July 12, 2024 Time: 7:00PM 8:00 PM
- 12. Invited as resource person for 6 days FDTP on "Neural Networks and Deep Learning" organzied by Sri Venkateswara college of Engineering and delivered lecture on the topic Third generation neural networks on 02.07.2024
- 13. Invited as Session Chair for IEEE 6th International Conference on Recent Trends in Advance Computing (ICRTAC), scheduled to be held from December 14th and 15th 2023, at Vellore Institute of Technology, Chennai..
- 14. Invited as speaker for Webinar for IEEE EXPO 2.0 Synergy Track on the occasion of "IEEE Day Celebration" on topic "Web frameworks" 04-10-2023 around 7:30PM 8:30PM. organized by IEEE Student Branch ,Panimar Engineering College.
- 15. Reviewer for Sai Hack-Internal Hackathon ,Prelims for SIH 2023 on 21.09.2023 and 22.09.2023
- 16. Invited as a speaker for the 2 days workshop on Intellectual Property Rights by IEEE SB SNIT, Sree NArayana Institute of Technology, Adoor on 12.08.2023
- 17. Invited as a speaker for the **I3 Safety Summit-Individual,Industry and Internet** and delivered talk on **Igniting Sparkle For Excellence Through Patent And Publication** organized by IEEE Mas Section YP team on 29.07.2023 at Hotel Klase,Guindy,Chennai
- 18. Reviewer for IEEE STEM Championship 2023,organized by IEEE Try Engineering.[Proof]
- 19. Session chair for National Conference on "Information and Communication Engineering" organized by Sri Sai Ram Institute of Technology, Chennai on 06-04-2023 [Proof]
- 20. Academic Jury member for IEEE YESIST 12,2023 global competition conducted by Sri Sai Ram Institute of Technology on 18.03.2023.
- 21. Talk on "Data Analytics and Future Scope" as Key note speaker at International Congress on "Recent Trends in Computer Science" organized by Bangladesh Chapter on 17.03.2023
- 22. Invited as trainer for Industry training at Azentio Software Pvt LTd, Chennai from 14-03-2023 to 16-03-2023 to the interns on the topic "SQL"

- 23. Delivered talk on "Opportunites in IEEE-WIE", St. Joseph Institute of Technology on 07.03.2023.
- 24. Delivered talk on "Awareness IEEE-WIE" to Women in Engineering Affintiy Group, Sri Sai Ram Institute of Technology, Chennai on 02.03.2023.
- 25. Invited as trainer for Industry training at Azentio Software Pvt LTd,Chennai from 10-01-2023 to 12-01-2023 to the interns on the topic "SQL"
- 26. Invited as Expert Speaker for IEEE Expo 22 "SYNERGY" Series and presented talk on "Introduction to Deep Learning " on 16.10.2022 organized by IEEE SB,Panimalar Institute of Technology.
- 27. Delivered an Expert talk on "Deep Learning and its Applications" in ISTE Sponsored Short Term Training Programme Organized by CSBS Dept,Sri Sairam Engg College on 26.07.2022
- 28. Delivered Expert talk on "Introduction to Deep Learning Methods and its applications" on 13.07.2022 in 5 days Faculty Development Programme, organized by Department of Artificial Intelligence and Data Science, Sri Sairam Engineering College, Chennai-44
- 29. Jury Panel in Nobicom-22, National Level Technical Symposium organized by IEEE SB, Panimalar Institute of Technology on 28-05-2022
- 30. Session Chair in IEEE International Conference on Communication, Computing and IoT, Organized by Department of ECE, Sri Sairam Engineering College, Chennai Sri Sairam Engineering College, Chennai from March 10th &11th, 2022.
- 31. Delivered talk on Engineer to Researcher at IEEE SPAC' 2022(Student Professional Awareness Congress organized by Jeppiar Institute of Technology on 10th March 2022
- 32. Delivered Expert Talk on Data Analytics to IEEE CIS SBC students, organized by Department of AI &DS ,Sri Sai Ram Engineering College on 26.11.2021.
- 33. Delivered talk on **Exploring Modern Web Development with frameworks**" organized by IEEE Student Branch BUBT and IEEE BUBT CS SBC ,Bangladesh on 21.10.2021.
- 34. Delivered talk on "Reseach fields in IEEE" organized by IEEE student branch chapter, Jeppiar Engineering College on 30-07-2021.
- 35. Acted as a Jury member for IEEE YESIST 12 JUNIOR EINSTEIN Project expo. Organized by IEEE Student Branch, Jeppiar Institute of Technology on 25-07-2021
- 36. Delivered a guest lecture on "Applications of AI for Data Science" for AICTE Sponsored Six days Virtual Short Term Training Programme (STTP) on "APPLICATIONS OF ARTIFICIAL INTELLIGENCE TOWARDS INDUSTRY 4.0", organized by Department of Electronics and Instrumentation Engineering, Sri Sai Ram Engineering College.
- 37. Delivered talk on "IoT and Analytics" to the students of Sathyabama Institute of Science and Technology on 21.10.2020
- 38. Delivered talk "DATA ANALYTICS AND BASICS OF R LANGUAGE" in International Webinar organized by IEEE Student Branch Chapter ,Panimalar Engineering College on April 11,2020
- 39. Delivered webinar talk on "DATA ANALYTICS AND BASICS OF R

- LANGUAGE "organized by IEEE Computer Society-Student Branch Chapter,Sri Sai Ram Engineering College on 8 April 2020
- 30.Resource Person for Hands on Training on "R Programming", Organized by Sri Venkateswara College of Technology, Chennai on 18.02.2020
- 33.Resource Person for Training programme on "Python Programming" organized by NITTTR, Taramani, Chennai on 12.03.2020
- 34.Resource person for two days FDP from 8.11.2019 to 9.11.2019 conducted for Government school teachers of Kanchipuram on "Python programming" organized by Department of Information Technology and Skill Development Club, Sri Sai Ram Engg College.
- 35.Trainer for training session on "Basics of cloud computing" for employees of Chennai Branch, The Royal Bank of Scotland on 20.09.2019
- 36.Resource person in ICCCT'19 IEEE conference paper presentation.
- 37.Session Chair in NCRTCT 18 National Conference On Recent Trends In Computing Technology organized by Department of Information Technology, Sri Sairam Engineering College, Chennai on 7/3/2018.

# PROPOSALS SUBMITTED

- a. Submitted Proposal on **DDoSChain: A Blockchain-Enhanced Machine Learning Framework for Dynamic Threat Mitigation.to** Cyber Security
  Group, Meity With cost: 27.10 Laksh
- Submitted project : Mental Health Tracker for Mute people using sign language Cost: 27,17,339 Principal Investigator:Dr.Soma Prathibha and Co-PI-Ms.T.Manju
- c. .Submitted proposal to BIS Funding "Study of Cloud Infrastructure Cost :: 3,54,000 Principal Investigator:Dr.Soma Prathibha
  Co-PI:Ms.B.Kamala,Ms.Anitha Jebamani
- d. Submitted project "INTELLIGENT WALKING CANE FOR VISUALLY IMPAIRED INDIA" to EPICS in IEEE Proposals on 01-06-2023
- e. Submitted project "Rural Solar Electrification Station Project" to 2022 IEEE HAC/SIGHT Projects Call for Proposals Focused on Pressing Community Needs
- f. Submitted project "TeleFit" 2021 IEEE HAC/SIGHT Projects Focus on COVID-19 Response & Pressing Community Need (CfP2)
- g. Submitted project Contactless Face Mask Dispenser with UV Sanitizer for Public Places 2021 IEEE HAC/SIGHT Projects Focus on COVID-19 Response & Pressing Community Need (CfP2)]
- h. Co -Prinicpal Investigator for the proposal "Cost Effective Agriculture Solution for Crop Yield Prediction and Monitoring using Reinforcement Deep Learning Algorithms" submitted under the SERB POWER Grant scheme on 11.01.2021

- i. Co-ordinator for the SERB National workshop proposal "SAIHC SERVICES OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE" submitted on 21.12.2020
- j. Co-cordinator for the proposal "Multi-Device Service (Mobile Phone, Laptop and Desktop) Skill Development Programme" submitted under the FOR GRANT UNDER THE SCHEME DISSEMINATION OF INNOVATIVE TECHNOLOGY (DIT) -2020-21
- k. Co -Prinicpal Investigator for the proposal "An Innovative method for enhancing the soil fertility and plant nutrient management using CRA Neural Networks" submitted under Indo-Sri lankan Joint Research Project Scheme, Nov-2019.DST
- 1. Co- Prinicpal Investigator for the Bi-lateral workshop proposal "Frontiers in Application of Machine Learning and Internet of Things in IOT" submitted under Indo-Sri lankan Bi-lateral Workshop Scheme, Nov, 2019, DST
- m. Submitted Proposal titled "Empowering the rural women of SomangalamVillage of West Tambaram with ICT Skills" under the scheme DISSEMINATION OF INNOVATIVE TECHNOLOGY (DIT), TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, Chennai
- n. Co- Prinicpal Investigator for the proposal ""A SMART VISION An Electronic Navigation Gadget for Visually Impaired People" submitted under Core Research Grant Scheme, SERB on 14.06.2019

### **Membership in Professional Bodies**

- 1. IEEE Senior Member 94183754
- 2. Cryptology Research Society of India Life Member-L/0967
- 3. ISTE Life memberLM131629(From Dec 4,2020)
- 4. Member in International Association of Computer Science and Information Technology (IACSIT), Singapore, No. 80344599
- 5. Institute For Engineering Research and Publication (IFERP)Membership PMIN39705426 **Programme organized:** 
  - ♦ Organized 3 days IEEE Humanatirian Conclave NCHT'23 from Sep 27 to 29 with 4000 students participating from Sri Sairam Institutions, Chennai
  - ❖ Organized 3 days global project Mainfestation event on the theme Innovation towards rural development from May 16 ,2022 to May 18,2022 funded by IEEE SPAA and IEEE Inspire India.
  - ❖ Organized IEEE SIGHT Day ,2022 at Government Higher Secondary School,Poonthandalam Village on behalf of IEEE Computer Society on 28.04.2022

- ❖ Co-chair for 4th International Conference on Computing and Communication Technologies (ICCCT'21) on 16.12.2021 and 17.12.2021 (IEEE Conference ID:53315) proceedings of the conference available in IEEE Digital Explore https://ieeexplore.ieee.org/xpl/conhome/9711752/proceeding
- ❖ Organized two days online IEEE Day 2021 celebration on behalf of IEEE Computer society-SBC for Sri Sairam Higher Secondary school, Tambaram on 21.10.2021
- ❖ Organized 3 days International Hackathon event Technovacion 21 funded by IEEE SPAA from May 13 ,2022 to May 15,2022
- ❖ Organized two days online IEEE Day 2020 celebration on behalf of IEEE Computer society-SBC for Higher Secondary school students on 10.10.2020 and 11.10.2020
- ♦ Event coordinator for five days "Python Programming" organized from 5/10/2020 to 9/10/2020
- ♦ Event Coordinator for five days "Java Essentials" Training Programme organized from 21/09/2020 to 25/09/2020
- ❖ Organized two days online National Level Coding contest "CodeFete" on behalf of IEEE Computer society-SBC sponsored by IEEE SPAA on 10.10.2020 and 11.10.2020
- ❖ Organized a state level IEEE event STEP-2020- Discovering Your Professional Future on 4-01-2020 in association with IEEE YP MAS section and sponsored by IEEE SPAA
- ♦ Organized IEEE Day 2019 on behalf of IEEE Computer society-SBC for Sairam Higher Secondary school students on 01.10.2019
- ❖ Organized Education outreach programme on 18.07.2019 by IEEE Computer society-SBC students at R.C.M Higher secondary school, Dharkast, West Tambaram, Chennai.
- ❖ Organized Two days Workshop on R Programming in association with IEEE Computer Society of India ,on 25.2.2018 and 26.02.2018
- ♦ Organized Educational Outreach programmes to Govt Schools to teach computer skills in 2017, 2018,2019 for IEEE-CS student members

- ❖ Co-ordinator for 3rd International Conference on Computing and Communication Technologies (ICCCT'19) held on 21 st & 22 nd Feb 2019 in the Department of Information Technology, Sri Sairam Engineering College, Chennai
- ❖ Co-ordinator for IEEE2015 International Conference on Computing and Communications Technologies (ICCCT), 26-27 Feb 2015,organized by Department of Information Technology,Sri Sai Ram Engg College.
- ❖ Co-ordinator for IEEE2017 International Conference on Computing and Communications Technologies (ICCCT), 23-24 Feb 2017,organized by Department of Information Technology,Sri Sai Ram Engg College.
- ❖ Coordinator for ISTE Chapter sponsored National Conference on Recent Trends in Computing and Technology(NCRTCT'16), organized by Department of Information Technology,Sri Sai Ram Engg College in association with ICTACT

### **REVIEW MEMBER/QUESTION PAPER SETTING:**

- 1. Review member for IEEE First International Conference on Networking and Communications organized by SRM University on 05 and 06 of April 2023
- 2. <u>QP Scrutiny Committee member for CSE/IT board subjects at Prince Shri Padmavathy Venkateswara Engineering College on 20.04.2022(Link)</u>
- 3. QP Scrutiny Committee member for CSE/It board subjects at Saveetha Engg College on 22-06-2022.
- 4. Appointed as the Question paper setter for "20PCSE04-Real Time Systems, M.E. / M.TECH Programme, Excel Engineering College, Nov -Dec 2021.
- 5. Editorial Member of International Journal of Intelligent Information Systems, ISSN Print: 2328-7675, ISSN Online: 2328-7683, Science Publication Group
- 6. Appointed as the Question paper setter for "IT-6701 ,Information Management" for Sri Valliammai Engineering College(An Autonomous Institution) for the October-November 2019 Examinations
- 7. Reviewed papers for Computer Communication(Elseiver Publisher),Informatica ,FGCS and Soft Computing
- 8. Acted as a review committee member for papers in IEEE International Conference on Computer and Communication Technologies ICCCT'19 organized by Department of Information Technology, Sri Sairam Engineering College
- 9. Acted as a review committee member for papers in International Conference on Recent Trends in Computational Engineering and Technologies-ICTRCET'18 organized by Department of Computer Science and Engineering of RajaRajeswariCollege of Engineering, Bangalore.

10. Acted as a review committee member for papers in IEEE International Conference on Computer and Communication Technologies – ICCCT'19,ICCCT'17,ICCCT'15 organized by Department of Information Technology, Sri Sairam Engineering College.

### **CITATION AND INDEX OF MY RESEARCH ARTICLES:**

- 1. Research articles are Indexed in Elsevier, Scopus, Sci Index, Ulrich, DOAJ,EBSCO, and Google Scholar.
- 2. Research Articles Cited in Cite Seer ,I-SCHOLAR,Free patent online and Google Scholar.
- 3. Google Scholar citation (Citation articles: 305, h-index-8 and i-10 index-6)

### WORKSHOP / SEMINARS/FDP/STTP ATTENDED

- 1. Attended two days IEEE Returning Mothers Conference organized at IISc,Bengaluru from 15-11-2024 to 16-11-2024.
- 2. Attended one week National Level Online FDP on "Generative AI models and Applications of Machine Learning "Organized by Shri Vishnu Engineering College for Women (A), Bhimavaram from May 21-25,2024
- 3. Attended one week ATAL FDP on Quantum Computing and its future scope from 18.12.2023 to 26.12.2023 conducted by Dept of ECE,Sri Sairam Engineering College
- 4. Attended 3 days FDP on LTI
- 5. Attended 3 days FDP on Kubernetes Containerization organized by Red Hat Academy at Sri Sai Ram Institute of Technology from 12.07.2023 to 14.07.2023.
- 6. Attended 5 days Faculty Development Program on Cloud Practitioner (AWS) conducted by ICT Academy on 12 Dec 2022 to Dec 2022 at Hindustan Institute of Technology and Science.
- 7. Attended one week FDP course on Cyber crime and Forensic tools from 23.05.2022 to 27.05.2022 conducted by Information Management and Emerging Engineering Department, NITTTR Chandigarh organized at Sri Sairam Engineering College.
- 8. Attended 3 days FDP on Migrating OS to Enterprise Cloud Environment from 12th April 2022 to 14th April 2022 at Sri Sairam Engineering College.
- 9. Attended FDP on "NAtural Inspired Computing Applied to Engineering" organized by IEEE CIS Chapter and hosted by Sri SaiRam Engineering College held online from July 23-26,2021
- 10. Attended 5 days ATAL FDP on AR/VR organized by dept of information technology,sri sai rame engineering college from 9.12.21 to Adhi college of
- 11. Completed the Online Orientation Training Programme for Mentors organized from 5<sup>th</sup> to 9<sup>th</sup> July 2021 under NITTTR
- 12. Attended 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE)

- from 26 July, 2021 to 30 July, 2021. Dr. Rajneesh Arora Prof. Rajive Kumar Chairman Member Secretary, AICTE National Coordination Committee for Induction Progra
- 13. Attended 3 days IEEE R10 EAC Sponsored Capacity Building Workshop: Education 4.0
   Role of Educational Technologies.hosted by IEEE Pune section from July 15<sup>th</sup> 2021 to July 17<sup>th</sup> 2021
- 14. Participated in the 2-days Workshop on Routers and Switches using CISCO Packet Tracer organized by IEEE Communications Society Madras Chapter on July 16 & 17, 2021
- 15. Attended five days ATAL FDP on "Internet of Things" conducted by Department of Instrumentation Control Engineering, Sri Manakula Vinayagar Engineering College from Feb 1st to Feb 5th, 2021
- 16. Attended five days ATAL FDP on "IOT" conducted by Department of Computer Science and Engg, Sri Sai Ram Engg college from Nov 30-Dec 4 2020
- 17. Attended five days ATAL FDP on "Robust and Scalable web development using Python "conducted by Sri Vidhyaniketan Engg college, Tirupathi from 21.09.2020 to 25.09.2020
- 18. Attended five days ATAL FDP on "Block chain" conducted by JNTUA , Anantapur from 20.04.2020 to 24.04.2020
- 19. Attended STTP on "AI in Healthcare" conducted by SSN College from 14.12.2020 to 20.12.2020
- 20. Attended five days ATAK FDP on "IOT" conducted by Department of Computer Science and Engg,Sri Sai Ram Engg college from Nov 30-Dec 4 2020
- 21. Attended Two days International Conference on "Software Defined Networking" organized by Anna University, Chennai during 09. 08.2019&10.08.2019
- 22. Attended Five days FDP on "Cloud Security and Blockchain Technologies" from 22.04.2019 to 26.04.2019,organized by Department of Information Technology,SriSai Ram Engineering in association with ISTE student Chapter.
- 23. Attended Five days FDPon NexGen Tech Stack from 08.04.2019 to 12.04.2019 organized by Department of Computer Science Engg,SriSai Ram Engineering College in association with CSI Student Chapter
- 24. Attended Two Days Saptahaant
  ShikshakPrashikshan "Introduction to Machine Learning" conducted by
  IITKharagpur held on 16th and 17th December 2017,at RCC,Anna University
- 25. Attended Three days National workshop on Cryptology from 28.08.2017 to 30.08.2017, organized by Department of Computer Science and Engg ,NIT Trichy ,in association with Cryptology Society of India
- 26. Attended Five days FDP programme on Data Science and Big Data Analytics from 11.9.2017 to 15.9.2017 conducted by Department of Information Technology in association with ICTACADEMY
- 27. Attended one day workshop on Java IOT Developer Course Launch Event organized by Oracle University on 11-01-2017 at ITC Grand, Chennai, India

- 28. Attended two days workshop on "Computational Intelligence Techniques" on 20th and 21st October 2017 at MIT, Chennai organized by Department of Electronics Engineering
- 29. Attended one day VMware seminar on SDS(Software-defined storage) organized by VMware Software India Pvt. Ltd. on 25-05-2016 at ITC Grand, Chennai, India.
- 30. Attended 3 days workshop of "Data center virtualization fundamentals Organized by ICTACT from 9-11,May 2016 at Anand Institute of Higher Technology ,Chennai
- 31. Attended one day Workshop on Author workshop jointly organized by Springer and Anna University on 2-11-2015 at Anna University, Chennai.
- 32. Attended one day workshop on "IEEE Author Workshop-How to publish technical paper with IEEE" on 20-08-2015 Sponsored by IEEE Xplore at IIT-Madras
- 33. Attended one day workshop on "How to write research papers for referred journals" on 24- 01-2015, organized by Department of Electronics and Communication Engineering Sri Sai Ram Institute of Technology, Chennai
- 34. Attended workshop on "Cloud Computing" organized by Department of Information Technology, St. Josephs college of engineering on 04.09.2014
- 35. Attended FDP program on "Cloud Computing" organized by Department of IT,SriSai Ram Engineering College in Association with TCS on 5.5.2014
- 36. Attended one day summit on Bigdata at VIT, Chennai on 25.04.2014.
- 37. Attended 2 days National Level Seminar ton Recent Trends in cloud computing from 20.1.2014 and 21.1.2014 at SRMUniversity, Chennai.
- 38. Attended 2 days workshop on cloud setup,software and solutions from October 24th & 25th ,2013 organized and conducted by Anna University ,in association with SamSung,VMWare and Fujitsu
- 39. Attended AICTE sponsored National level seminar on cloud computing and mining on26.9.2013 and 27.9.2013 organized by MCA dept, SriSai Ram Engg College.
- 40. Attended two days national level workshop on Open source cloud computing platforms atB.S.AbdurRahmanUniversity,Chennai from 18.9.2013 -19.9.2013
- 41. Attended project training on creating ecommerce cloud shop using Amazon AWSandUbantu organized by Synapticdots, Chennai on June 15-16,2013
- 42. Attended National Workshop on "Journal and Thesis Writing" organized by Anna University in association with Springer on 29.01.2013.
- 43. Attended "International Workshop on Data Mining and Web Intelligence" From 20-01-2011 to 21-01-2011 conducted by Dept Of Information Technology, MIT, Anna University, Chennai
- 44. Attended AICTE sponsored Staff Development Programme on "Instructional Design and Delivery "conducted by Department of Computer science and Enng,SSEC,Chennai .
- 45. Attended National Seminar on "Research Methodologies in Next generation Wireless Network using OPNET "at SSEC ,Chennai from 19.08.2010 to 21.08.2010.

- 46. Attended AICTE Staff Development Programme on "Recent Development In Computing", conducted by department of computer science and Engineering, at SSEC, Chennai.
- 47. Attended AICTE Sponsored staff development Programme on "Mobile Networks" at SSEC, Chennai from 19th to 30th January 2009
- 48. Attended Anna University sponsored Faculty Development Program on "Mobile Computing" Conducted by MIT, Chennai 19 -05-2008 to 25-05-2008.
- 49. Attended 2 days work shop on "Middle ware Technologies" conducted by MCA department, SriSai Ram EnggCollege, Chennai on 5th and 6th April 2006.
- 50. Attended Anna University sponsored Faculty Development Program on "Web Technology" Conducted by Department of Computer Science, SriSai Ram Engg College in association qithTCS from 15 -05-2006 to 25-05-2006.
- 51. Attended FDPProgramme on "Computer Architecture" at SSEC, Chennaion 3rd and 4th Nov 2005.
- 52. Attended Two Days National Conference on "Distributed Computing and Knowledge Management NCDK '05" on 16 -17 sept 2005 at Sri Sai ram Engg College.

#### **COURSES COMPLETED**

- NITTTR AICTE 8 MODULE CERTIFICATIONS: Module 1 to Module 8 completed
- NPTEL:Cloud Computing(2017) and Introduction to IOT(2023)
- VoLT Graduation course conducted by IEEE MGA in 2023

## Responsibilities at Sri Sai Ram Engineering College

- 1. .Department NBA Coordinator
- 2. Member of NAAC Committee.
- 3. Department Website co-ordinator.(2018-2020)
- 4. Department Seminar Coordinator :Arranging guest lectures, workshops and seminars for students and faculties on latest technologies by bringing in subject technology experts from Industry and Academia
- 5. ISO Co-ordinator(2014-2016)
- 6. .IEEE Computer Society student branch chapter Advisor(From 2017)
- 7. Time Table Co-ordinator (2012-2014)
- 8. Industrial Visit Coordinator: Arranged more than 15 industrial visits the major IT companies and PSU
- 9. Class Co-ordinator for 2018-2022 and 2007 -2011 batches
- 10. IEEE HKN Nu Eta Chapter Faculty Advisor

### **IEEE Funding Received**

S.No	Funding/Scholarships/Travel Grant	Amount	Year	Funding Body
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1	Chapter Start-up Funding	USD 150	2017	IEEE Computer Society,USA
2	Dr.Soma Prathibha,Travel Grant	INR 10000	2019	IEEE Madras Section
3	IEEE-CS Yearly Chapter Funding	USD 150	2020	IEEE Computer Society,USA
4	STEP Event	USD 400	2020	IEEE SPAX
5	National Level Coding Event-Codefete	USD 200	2020	IEEE SPAX
6	Technovacion-21-International Hackathon Contest	USD 300	2021	IEEE SPAX
7	IEEE-CS Yearly Funding	USD 270	2021	IEEE Computer Society,USA
8	SPAx Funding - Technovacion'22 - A 2 day Global Project Manifestation	USD 350	2022	IEEE SPAX
9	STEM Championship - Dr. Soma Prathibha	USD 200	2022	IEEE TRYEngineering
10	2022 Chapter Grant - Leanr-O-Mania	USD 200	2022	IEEE Computer Society,USA
11	HAC-SIGHT Funding - Rural Solar Electrification Station Project	USD 4000	2023	IEEE HAC/SIGHT
12	2023 Chapter Grant	USD 800	2023	IEEE Computer Society,USA
13	IEEE TechX	USD 1000	2024	IEEE CS SYP
14	IEEE SPAX funding for Sauras 2024	USD 200	2024	IEEE SPAX
15	IEEE Try Engineering funding for STEM Event PhysicsForge	USD 700	2024	IEEE TRYEngineering

16	IEEE HKN Chapter Grant for conducting STEM activity for Girl students of Govt school	USD 200	2024	IEEE HKN
17	Two Days Workshop on Fog Computing and AR/VR Technologies	INR 15000	2024	IEEE Computer Society,Madras Section Madras Section