# Sri Sairam Engineering College Department of Information Technology

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Name:	S.Gomathi
<b>Designation:</b>	Associate Professor
Qualification:	
Quanticution (	M.Tech., (Ph.D)
Area of Specialization :	Image Processing, Deep Learning
Experience :	Teaching:16 Yrs. 06 months
Experience:	UG: - 16 Yrs 06 months
	PG: - 06 Yrs
No. of workshop / Conferences /	FDP: 24
FDP attended:	National Conference: 2
	<b>International Conference:27</b>
Publication:	Journal
	National : - Nil
	SCI:3
	Conference
	National: 1
	International: 15
Research Guidance: -	Nil
Membership:	Member in International Association of Engineers
<b>P</b>	- IAENG (No - 205622)
	<b>Member in International Computer Science</b>
	and Engineering Society - ICSES (No -3933)
	Member in Institution of Engineers

	Society(IEI) -M-167108-6.
	Member in Life Member, International
	Society for Technology in Education
	(ISTE) – LM- 131634
	<b>Member in IEEE – 98091501</b>
	Senior Member in IEEE.
Achievements:	Score 100% result in many subjects.

# Area of Specialization

- Operating System
- Data Warehousing & Mining
- Computer Networks
- Data Structures
- Software Architectures
- Cyber Forensics
- Distributed Systems
- Cryptography and Network Security
- Mobile Networks
- Artificial Intelligence
- Medical Image Analysis

## **FDP Attended**

- 1. Attended a FDP on Oracle Training Course Java Fundamentals and Programming by Department of Information Technology, at Sri Sairam Engineering College from
- 2. Attended a FDP on IT6711- Data mining Lab at Jeppiaar SRR Engineering College on 17.06.16 & 18.06.16.
- 3. Attended a FDP on Grid, Cloud & Data mining conducted by Department of Information Technology, Sri Sairam Engineering College, Chennai from 20.06.16 to 24.06.16.
- 4. Attended a FDP on TCS AWS by Department of Placement, Sri Sairam Engineering College, Chennai from 20.06.17 to 24.06.17.
- 5. Attended a FDP on IOT-Business4.0 & Block chain Technology at TCS Siruseri on 27.10.2018
- 6. Attended a FDP on Python Programming by ICTACADEMY at Sri Sairam Institute of technology, Chennai from 29.10.18 and 30.10.18.

- 7. Attended a FDP on Engineering Teaching Pedagogy and Teaching Learning Process by SIMS, Sri Sairam Engineering College, Chennai from 3.12.2018 7.12.2018.
- 8. Attended a FDP on Renewable Energy Sources by Department of EEE, Sri Sairam Engineering College, Chennai from 22.07.19 26.07.19.
- 9. Attended a FDP on Cryptography and Network Security by Department of Computer Science and Engineering, Panimalar Engineering College, Chennai from 11.05.20-15.05.20.
- 10. Attended a FDP on Blended and Flipped Learning by NITTTR, Chennai from 24.08.20-28.08.20.
- 11. Attended a FDP on Artificial Intelligence by Sri Krishna College of Engineering & Technology, Coimbatore from 31.08.20-04.09.20.
- 12. Attended a STTP on Medical Image Analysis by V.S.B.Engineering College, Karur from 02.11.20 07.11.20.
- 13. Attended a FDP on Inculcating Universal Human Values in Technical Education by AICTE-NewDelhi from 12.07.21 16.07.21
- 14. Attended a FDP on Principles of Artificial Intelligence, Machine Learning, and Deep Learning by AICTE from 26.11.21 30.11.21.
- 15. Attended a Workshop on ART OF RESEARCH by SRI SAIRAM INSTITUTE OF TECHNOLOGY from 23.08.21- 24.08.21
- 16. Attended a Workshop on Cloud Fog and Edge Computing Platforms for Industrial IOT by MEPCO SCHLENK ENGINEERING COLLEGE, SIVAKAKASI from 25.10.21 27.10.21
- 17. Attended a FDP on Deep Learning & its Applications by Sri Sai Ram Engineering College from 11.07.22 15.07.22
- 18. Attended a FDP on Machine Learning in Healthcare by Sri Sai Ram Engineering College from 09.01.23 13.01.23.
- 19. Attended a FDP on Deep Learning Toolkits and their Diverse Uses by Sri Sai Ram Engineering College from 05.07.23 07.07.23.
- 20. Attended a FDP on AI and NLP Case Studies and Applications by Presidency University from 21/08/2023 to 25/08/2023.
- 21. Attended a FDP on Cutting Edge Trends in Deep Learning by Sathyabama Institute of Science and Technology from 3.10.2023 to 13.10.2023.
- 22. Attended a FDP on Programming in Java by NPTEL from Jan 2024 to April 2024.
- 23. Attended a FDP on Data Analytics with Python for Media Applications by NITTTR from 27/05/2024 to 31/05/2024.
- 24. Attended a FDP on Data Structures and Algorithms using Java by NPTEL from July 2024 to December 2024.

# FDP / Webinars Organized:

- 1. Organized a FDP on Grid, Cloud & Data Mining conducted by Department of Information Technology, Sri Sairam Engineering College, Chennai from 20.06.16 to 24.06.16.
- **2.** Organized Skill Saathi National wide Career Counseling Program conducted byICTACADEMY at Sri Sairam Engineering College, Chennai on 08.02.2019.
- **3.** Organized Saitechgrail'19 Mini Project Expo Conducted by Department of Information Technology, Sri Sairam Engineering College, Chennai on 12.03.2019.
- **4.** Organized a FDP on Augmented Reality and Virtual Reality by Department of Information Technology, Sri Sairam Engineering College, Chennai from 27.05.20 to 29.05.20.
- **5.** Organized a Webinar on Deep Learning by Department of Information Technology, SriSairam Engineering College, Chennai on 27.10.20.
- **6.** Organized a Webinar on Introduction to Machine Learning by Department of Information Technology, SriSairam Engineering College, Chennai on 25<sup>th</sup> Nov 2021
- 7. Organized a Webinar Seminar on R Programming by Department of Information Technology, Sri Sairam Engineering College, Chennai on 18<sup>th</sup> Nov 2022.
- **8.** Organized a Webinar on R Programming by Department of Information Technology, SriSairam Engineering College, Chennai on 18<sup>th</sup> Nov 2022
- 9. Organized a Workshop on Mobile Application Development by Department of Information Technology, SriSairam Engineering College, Chennai on 16<sup>th</sup> and 17<sup>th</sup> of Nov 2022
- **10.** Organized a Workshop on SpringBoot by Department of Information Technology, SriSairam Engineering College, Chennai on 25<sup>th</sup> and 26<sup>th</sup> May 2023
- 11. Organized a Workshop on Bootcamp on Startup Mentoring by Department of Information Technology, Sri SairamEngineering College, Chennai on 18<sup>th</sup> and 19<sup>th</sup> July 2024.

## **Patent Accomplishments:**

Patent Published: 2

Title: My Guider Application in the year 2021.

Title: IoT Based Wearable Medical Health Monitoring Device

#### **International Conferences:**

- 1. Attended tutorial session on "Cloud Computing and Semantic Web" in the International Conference on "Information, Systems and Computing ICISC'13" in Sri Sairam Engineering College during 4<sup>th</sup> and 5<sup>th</sup> January, 2013.
- 2. Attended tutorial session on "Advanced Computing Technologies" in the "2015 International Conference on Computing and Communications Technologies (ICCCT'15)" in Sri Sairam Engineering College on 26-02-2015.
- 3. Salman.V, Srivenkatesh.K, **S.Gomathi** "Authenticated Secure Railway Service using Smart Card Technology" International Conference on Advances in Emerging Technology(ICAET'15) held at

- Jaya Engineering College on March 28, 2015.
- 4. Sharmila.R, Solai.A.L, **Ms.Gomathi.S**, "Mobile Heat Control by Using LM35Pct Sensors with LPC2148 Thermostat Microcontroller" International Conference on Emerging Trends in Engineering and Technology held at Chennai on March 27,2016.
- 5. "Mitigating insider data theft attacks in the cloud" IEEE sponsered International Conference on Science, Technology, Engineering and Management (ICONSTEM-2016) held at Jeppiaar Engineering College on March 30-31, 2016.
- 6. **S.Gomathi**, R.Varsha Rohini, Shreya P.R, S.Dheeksha "Web page design optimisation based on segment analytics" International Conference On Computing And Communications Technologies(ICCCT'17) held at Sri Sairam engineering college on February 23-24, 2017.
- 7. **S.Gomathi,** V.Varsha Rohini, Shreya P.R, S.Dheeksha "Conflict Avoidance In E-Commerce Applications" International Conference On Current Trends In Engineering Research (ICCTER- 2017) held at Chennai On March 25, 2017.
- 8. **S.Gomathi,** V.Aravinthan, M.Sanju, S.Selvam "CASECOP" "International conference on Communication, Computing and Internet of Things 2018-IC<sup>3</sup>IoT'18" held at Sri SairamEngineering College on February 15-17, 2018.
- 9. S.V.Scibi, C.Ramachandran, **S.Gomathi** "Educational Support for Poverty" "International Conference on Innovation, Entrepreneurship and Economy for Sustainable Development ICIEESD'18 held at Sri Sairam Engineering College on October 10-11, 2018.
- 10. **S.Gomathi**, M.Divya, P.Ilavarasi, M.Indumathi "IoT based Environmental monitoring system for smart cities" International Conference on Contemporary Engineering and technology 2019 (ICCET)" held at Prince Shri Venkateswara Padmavathy Engineering College on March 09, 2018.
- 11. **S.Gomathi,** V.Aravinthan, M.Sanju, S.Selvam "CASECOP: A Drone Case for Mobile" "International Conference on Computing and Communication Technologies ICCCT'19" held at Sri Sairam Engineering College on February 21-22, 2019.
- 12. **S.Gomathi**, Mukundhan, Monish "Communication for Paralyzed Patients" 9<sup>th</sup> International Conference on Education, Advance Management and Technology for Sustainable Development held at Sri Sairam Engineering College on 25<sup>th</sup> and 26<sup>th</sup> February 2020.
- 13. **S.Gomathi,** Kavipriya H, Priyadharshini P "Detection of Skin Cancer using Neural Network Analysis" International Conference on Computing, Communications & Control 2020 ICCCC'2020 held at Sri Sairam Engineering College on 28<sup>th</sup> & 29<sup>th</sup> February 20.
- 14. Swetha, S., Vijayalakshmi, J., & **Gomathi, S**. (2021, December). "Social Distancing and Face Mask Monitoring System Using Deep Learning Based on COVID-19 Directive Measures". In 2021 4th International Conference on Computing and Communications Technologies (ICCCT) (pp. 520-526). IEEE.
- 15. **Gomathi, S.**, & Sudhakar, S. (2021, December). "A Deep Review On Skin Cancer Through Deep Residual Networks". In 2021 4th International Conference on Computing and Communications Technologies (ICCCT) (pp. 464-468). IEEE.
- 16. **Gomathi, S.,** & Vijayalakshmi, J. (2021, December). "Secure E-Governance System To Preserve Justice And Right Decision Making Using Cloud Computing". In 2021 4th International Conference on Computing and Communications Technologies (ICCCT) (pp. 305-308). IEEE.
- 17. Sreenivasu, S. V. N., **Gomathi, S.,** Kumar, M. J., Prathap, L., Madduri, A., Almutairi, K., ... & Jayadhas, S. A. (2022). "Dense convolutional neural network for detection of cancer from CT images". BioMed Research International, 2022.
- 18. **Gomathi, S.**, Nishanth, S., & Nikhitha, S. (2022, May). "Skin Disease Classification using Convolutional Neural Network". In 2022 International Conference on Applied Artificial Intelligence and Computing (ICAAIC) (pp. 177-182). IEEE.
- 19. Gomathi, S., Raj, K. V., & Aakash, R. V. (2022, November). "Design and Implementation of an

- Iot-Based System For Monitoring Nutrients And Irrigation In Agricultural Soil". In 2022 1stInternational Conference on Computational Science and Technology (ICCST) (pp. 786-792). IEEE.
- 20. Swetha.S., **Gomathi.,S** (2022 April)"Automated Early stage diagnosis of multi-disease prediction using deep learning" In Edge 2022 Conference at Rajalakshmi Engineering College.
- 21. **Gomathi, S.**, Sree, G. N., & Thennilaa, V. S. (2023, April). Smart Searching Product. In 2023 International Conference on Networking and Communications (ICNWC) (pp. 1-5). IEEE.
- 22. **Gomathi, S.**, Tharun Kumar, Tharun Raj. (2023, April). "Proacto Fall Detection System" Smart Searching Product. In 4th edition of International Conference on Internet of Things (ICIoT 2023). IEEE.
- 23. **Gomathi, S.**, Hariharan, Siddharthan. (2023, April). "Detection and prevention of credit card fraud using HMM model and Formula based authentication system for secured transactions". International E-Conference on Information, Communication and Networking (ICCICN-2023) IEEE.
- 24. **Gomathi, S.**, Raj, K. V., & Aakash, R. V. (2022, November). "Design and Implementation of an Iot-Based System For Monitoring Nutrients And Irrigation In Agricultural Soil". Published in IEEE, DOI:10.1109/ICCST55948.2022.10040340, 14 February 2023.
- 25. **Gomathi S**;Jayalakshmi D;Haritha S (2024, Jan). "VISUALLY IMPAIRED JOB ALERT PROVIDER APP".Published in IEEE, DOI: 10.1109/RMKMATE59243.2023.10369154, 03 Jan 2024
- 26. **Gomathi, S.**, Punitha, S., & Vijila, S. A. (2023, December). Jackfruit Tree Disease Detection Using Deep Learning. In 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) (pp. 01-08). IEEE
- 27. Arunachalam, N., & Gomathi, S. (2023, November). Deep Learning-Based Automated Early-Stage Diagnosis of Multiple Diseases. In 2023 International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE) (pp. 1-8). IEEE.

#### **National Conferences:**

**1.** S.Gomathi, Pavithra Devi.C, Nandhini Priya.R, Mathangi.N "S.A.F.E (Self-Defense Awareness And Familiarisation Exchange)" "National Conference on Smart Innovations in Communications & Computing – NCSICC'18 held at Sri Sairam Engineering College on March27, 2018.

## **International Journal:**

- 1. Salman.V, Srivenkatesh.K, S.Gomathi, "Authenticated Secure Railway Service using Smart Card Technology" published in the CIIT International Journal of emerging Technology in Computer Science & Electronics (IJETCSE), DOI: WC032011011, Vol 3, No 3, March 2011.
- 2. Sharmila.R, Solai.A.L, Ms.Gomathi.S," Mobile Heat Control by Using LM35Pct Sensors with LPC2148 Thermostat Microcontroller" published in International Journal of Engineering Research in Computer Science and Engineering (IJERCSE) Vol 3, Issue 3, March 2016 [GOOGLE SCHOLAR INDEXING].
- 3. S.Gomathi, R.Varsha Rohini, Shreya P.R, S.Dheeksha "Web page design optimisation based on segment analytics" Published in IEEE Xplore, DOI: <a href="https://doi.org/10.1109/ICCCT2.2017.7972310">10.1109/ICCCT2.2017.7972310</a>, 11 July 2017 [ Scopus indexed ].
- 4. S.V.Scibi, C.Ramachandran, S.Gomathi " **Educational Support for Poverty**" Published in International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) Vol 8, Special Issue 3, December 2018.[Scopus Indexed].
- 5. S.Gomathi, V.Aravinthan, M.Sanju, S.Selvam "CASECOP: A Drone Case for Mobile" Published in IEEE Xplore, DOI: 10.1109/ICCCT2.2019.8824840. 5 September 2019 [Scopus

- indexed].
- 6. S.Gomathi, Kavipriya H, Priyadharshini P " **Detection of Skin Cancer using Neural Network Analysis**" Published in Journal of Critical Reviews (JCR), Vol 7, Issue 11, 2020, ISSN 2394-5125. [GOOGLE SCHOLAR INDEXING].
- 7. Swetha, S., Vijayalakshmi, J., & Gomathi, S. (2021, December). "Social Distancing and Face Mask Monitoring System Using Deep Learning Based on COVID-19 Directive Measures". Published in IEEE Xplore, DOI: 10.1109/ICCCT53315.2021.9711880, 18 February 2022.
- 8. Gomathi, S., & Sudhakar, S. (2021, December). "A Deep Review On Skin Cancer Through Deep Residual Networks". Published in IEEE Xplore, DOI: 10.1109/ICCCT53315.2021.9711808, 18 February 2022.
- 9. Gomathi, S., & Vijayalakshmi, J. (2021, December). "Secure E-Governance System To Preserve Justice And Right Decision Making Using Cloud Computing". Published in IEEE Xplore, DOI: 10.1109/ICCCT53315.2021.9711880, 18 February 2022.
- 10. Sreenivasu, S. V. N., Gomathi, S., Kumar, M. J., Prathap, L., Madduri, A., Almutairi, K., ... & Jayadhas, S. A. (2022). "Dense convolutional neural network for detection of cancer from CT images". Published in BioMed Research International, 10.1155/2022/1293548, June 2022.
- 11. Gomathi, S., Nishanth, S., & Nikhitha, S. (2022, May). "Skin Disease Classification using Convolutional Neural Network". Published in IEEE Xplore, DOI:10.1109/ICAAIC53929.2022.9792785, 16 June 2022.
- 12. Gomathi, S., Raj, K. V., & Aakash, R. V. (2022, November). "Design and Implementation of an Iot-Based System For Monitoring Nutrients And Irrigation In Agricultural Soil". Published in IEEE, DOI:10.1109/ICCST55948.2022.10040340, 14 February 2023.
- **13.** Gomathi, S., Sree, G. N., & Thennilaa, V. S. (2023, April). **"Smart Searching Product".** Published in IEEE, DOI: 10.1109/ICNWC57852.2023.10127340, 25 May 2023.
- 14. Gomathi S;Jayalakshmi D;Haritha S (2024, Jan). "VISUALLY IMPAIRED JOB ALERT PROVIDER APP". Published in IEEE, DOI: 10.1109/RMKMATE59243.2023.10369154, 03 Jan 2024.
- 15. Vijayaraj, N., Rajalakshmi, D., Immaculate, P. S., Sathianarayani, B., Rajeswari, S., & Gomathi, S. (2024). An Innovative approach to Improve the Quality of Pharmaceuticals approach using Cloud Computing. EAI Endorsed Transactions on Pervasive Health and Technology, 10.
- 16. Gomathi, S., Punitha, S., & Vijila, S. A. (2023, December). **Jackfruit Tree Disease Detection Using Deep Learning**. In 2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS) (pp. 01-08). IEEE.
- 17. Gomathi, S., & Arunachalam, N. (2024). Skin Lesion Prediction and Classification Using Innovative Modified Long Short-Term Memory-Based Hybrid Optimization Algorithm. International Journal of Computational Intelligence Systems, 17(1), 186.
- 18. Arunachalam, N., & Gomathi, S. (2023, November). **Deep Learning-Based Automated Early-Stage Diagnosis of Multiple Diseases**. In 2023 International Conference on Research Methodologies in Knowledge Management, Artificial Intelligence and Telecommunication Engineering (RMKMATE) (pp. 1-8). IEEE.

# **Book Chapters:**

- 1. Published chapter titled "Targeting and Automation with Digital Analytics" in Management Analytics and Software Engineering, ESN Publications, India, ISBN:978-81-950305-5-2, 2021
- 2. Published chapter titled "Geo Spatial Technology" in Recent trends in Engineering and Technology, Sri Sairam Engineering College, ISBN:978-8-19471-498-9

#### **Book Publication:**

1. Published a Book titled "R Programming for Statistical Analysis: by Ms.Anitha Jebamani, Assistant Professor, Ms.S.Gomathi, Assistant Professor, Ms.V.Narmadha, Assistant

### **Online Certifications**

- 1. Completed Machine learning courses on Machine Learning: Clustering & Retrieval, Machine Learning: Regression, Machine Learning Foundations: A Case Study, Approach, Machine Learning: Classification, The Sustainable Development Goals A global, transdisciplinary vision for the future, Machine Learning: Clustering & Retrieval, Machine Learning: Regression, Machine Learning: Classification in Coursera.
- 2. Completed 8 Modules in NITTTR conducted by AICTE.
- 3. Completed NPTEL course in Database Management Systems and DataMining.
- 4. Completed NPTEL Programming Domain

#### **Acheivements:**

- 1. Received Best Faculty Advisor Award 2021 from The Institution of Engineers Society(IEI) in the year 2021, 2023 and 2024.
- 2. Received Academic Excellence Award 2023 from The Institution of Engineers Society(IEI) in the year 2023.
- 3. Act as a Reviewer in 4th International Conference on Computing and Communications Technologies (ICCCT).
- 4. Act as a Reviewer in International Conference on Advances in Emerging Trends in Computer Applications (ICAETC-2023),
- 5. Industry Trainer for Azestar Intern training program on JAVA at Azentio Software Private Limited, Prince Infocity II for 3 Batches (10-01-2023 to 12-01-2023 & 14-03-2023 16-03-2023, 26.02.24 to 28.02.24)

#### **Conference Reviewer:**

- 1. Reviewer for 4th International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT- 2021) on December 10-11, 2021 at Nirma University
- 2. Reviewer for 4th International Conference on Computing and Communication Technologies(ICCCT'21) on December 16-17, 2021 at Sri Sai Ram Engineering College.
- 3. Act as a Journal Reviewer in Cluster Computing.

# **Academic/Professional Membership:**

- Life Member, International Association of Engineers IAENG (No 205622)
- Life Member, International Computer Science and Engineering Society ICSES (No -3933)
- Life Member, Institution of Engineers Society(IEI) –M-167108-6.Life
- Senior Member in IEEE.
- Member in IEEE 98091501
- Life Member, International Society for Technology in Education LM-131634

# **Other Activity:**

- Oracle Trainer Java Fundamentals and Programming from 2016 onwards.
- ICT Academy Certified Trainer for c Programming from 2018 onwards.
- IEI Department Student Coordinator
- IIRS Department Coordinator
- Department Exam Cell In charge