CURRICULUM VITAE

SARASWATHY S

Email: kavya08.ks@gmail.com
Ph: +91-98416 43808
Address:No:46, Old State Colony Road,
West Tambaram,Chennai-600 045,Tamil Nadu,India

QUALIFICATION

- M.Tech in Computer Science and Engineering, SRM University,2015.

- B.E in Computer Science and Engineering, Dr. Sivanthi Aditanar Engineering College, Anna University,2008

EXPERIENCE SUMMARY:

1. Working as an Assistant Professor (CSBS) in **Sri Sairam Engineering College**, Tambaram from 01.06.2023 to till date.
2. Worked as an Senior Lecturer in **PSB POLYTECHNIC COLLEGE,** Kelambakkam during the period 06.07.2011 to 30.05.2023

RESEARCH PUBLICATIONS (CONFERENCE PROCEEDINGS)

1. M.S. Srinivasa Rao, S.Saraswathy "**Efficient Model training in Decentralized Systems with Federated Learning",** 2nd International Conference on Communication, Security and Artificial Intelligence(ICCSAI-2023).
2. S.Saraswathy, Malathi J, Subiksha N "**A Hybrid Strategy Integrating Ant Colony Optimization and Locust-Inspired Algorithm (HACO-LA) to Boost Efficiency and Performance in cloud Resource Management"**
3. Thangamariappan, P., Singh, M., Arthi, M., Kannan, T., Saraswathy, S "**Enhanced Structural Image Classification using Hybrid CNN-GNN Model**" 2024 International Conference on Knowledge Engineering and Communication Systems, ICKECS 2024, 2024.
4. Devi, M.V., Surya, K.A.J., Meethashree, E., Keerthivasan, V.S., Saraswathy, S. "**Nonlinear SVM Classifier based Online Attendance System for Facial Recognition and Mask Detection**" 2024 International Conference on Knowledge Engineering and Communication Systems, ICKECS 2024, 2024
5. Rajagopal, K., Kumari, V.S., Saraswathy, S.Ponmaniraj, S., Deepa, A."**Hybrid Deep Learning Models with Genetic Algorithm Optimization for Enhanced Kidney Tumor Detection**" 5th International Conference on Electronics and Sustainable Communication Systems, ICESC 2024 - Proceedings, 2024, pp. 1525–1530

6. Rajagopal, K., Kumari, V.S., Saraswathy, S., Kumar, V.S., Deepa, A. "**Improving the Detection of Kidney Tumours Using Firefly Algorithm Optimisation**" 2nd International Conference on Intelligent Cyber Physical Systems and Internet of Things, ICoICI 2024 - Proceedings, 2024, pp. 898–902

7. S. T, T. A. K, A. S, L. A. P Y and S. S, "**Helmet Detection in Two Wheeler Using Image Processing,**" 2025 International Conference on Computing and Communication Technologies (ICCCT), Chennai, India, 2025, pp. 1-4, doi: 10.1109/ICCCT63501.2025.11020144.

8. S. S, J. K, A. S. R, M. S and A. R, "**Plastic Remediation in Rural Water Bodies,**" 2025 International Conference on Computing and Communication Technologies (ICCCT), Chennai, India, 2025, pp. 1-4, doi: 10.1109/ICCCT63501.2025.11019220.

9. S. S, S. K, J. M, G. L and M. V, "**HELM SENTRY Evaluation of Vehicle Self-Repairing System,**" 2025 International Conference on Computing and Communication Technologies (ICCCT), Chennai, India, 2025, pp. 1-5, doi: 10.1109/ICCCT63501.2025.11020069.

10. S. S, T. A, A. S, H. V and A. R, "**Tech for Inclusivity: A Universal Communication Device for Diverse Expression,**" 2025 International Conference on Computing and Communication Technologies (ICCCT), Chennai, India, 2025, pp. 1-6, doi: 10.1109/ICCCT63501.2025.11019158.

11. S. S, C. N. G, P. G. S, A. B. J and M. V, "**Echolight: A Camera-Powered Voice-Assisted Aid for the Visually Impaired,**" 2025 International Conference on Computing and Communication Technologies (ICCCT), Chennai, India, 2025, pp. 1-6, doi: 10.1109/ICCCT63501.2025.11019645.

12. **AUTOMATED DRAINING AND IRRIGATION SYSTEM (ADIS) ENABLED WITH AI** Saraswathy S , Sathish Kumar K , Livinesh L , Sachet K Simpur Journal of Agricultural Sciences (2025) , Vol. Vol. 1(1): 1-7 (2025) , pp.

NATIONAL CONFERENCE:

- S.Saraswathy, Sujitha K, Jothi "**A Broad view of Smart helmet redefining protection and Connectivity Devices**", A National Conference on Applications of AI & IoT in Engineering and Technologies(NCAAIET-2024), held on 10th Feb 2024 in Sri Bharathi Engineering College for Women.

- Presented a paper on **"Secure Data Retrieval for Disruption Tolerant Networks Using CP-ABE"** in National conference on Recent Innovation in Advanced Computing Technology - 2015.

PATENT FILING DETAILS:

1. Granted a patent on **"Artificial Intelligence Based Heart Disease Prediction Device",** 399810-001, 02-02 Dated 13/11/2023.

2. Published a patent on **"Plastic Debris Removal In Freshwater Bodies"**, 202541015070 A Dated 21.03.2025.

3. Published a patent on "**A Camera-Enabled Voice Assisted Aid For The Visually Impaired"**, .202541015069 A Dated 21.03.2025.

4. Published a patent on **"Assistive Communication Device For Multilingual And Sign-Based Interaction"**, 202541051181 A Dated 20.06.2025.

5. Published a patent on **"Automated Draining Irrigation System"**,.202541046791 A Dated 13.06.2025.

6. Published a patent on **"Helm Sentry Iot Based Intelligent Vehicle Health Monitoring System"**,202541114238 A Dated 16.01.2026.

BOOK PUBLICATIONS:

- Published a book titled '**Database Management Systems'** (ISBN-13: 978-93-6260-357-9) under Charulatha Publications.

CERTIFICATION

1. NPTEL Online certification on Programming in JAVA

2. NPTEL Online certification on Introduction to Internet of Things

3. NPTEL Online certification on Introduction to Machine Learning

4.Certification for Completion of **Ignite Entrepreneurship Course** conducted by

Wadhwani Entrepreneur Network(NEN),

5. NPTEL Online certification on Deep Learning

6. NPTEL Online certification on Data Analytics with Python.

7. NPTEL Online certification on Learning Analytics Tools.

NITTT MODULES :

- Successfully completed all eight modules of the National Initiative for Technical Teachers Training (NITTT).

ACHIEVEMENTS:

✔ Received a **Gold Medal** from SRM University, Kattankulathur for achieving academic Excellence (95.1 %).
✔ Received **Best Teacher award** -2018 from P.S.B. Polytechnic College, Kelambakkam.
✔ **IEEE proctor Appreciation Award** for the IEEEXtreme 17.0 programming competition.

- ✔ **Faculty Coordinator Appreciation Award** in hosting national level STTP Program on Java Full stack with React JS & AI organized by AICTE & Brain o Vision.
- ✔ **NPTEL Mentor Appreciation Award** for the NPTEL online Certification Course on Introduction to Database System during Jan -Apr 2024.
- ✔ **NPTEL Top Performing Mentor** Appreciation Award for the role as Mentor for the NPTEL online Certification Course on "Cloud Computing "during Jul -Dec 2024.
- ✔ **SkillRack Mentor Appreciation Award** for effective mentoring of a mentee who secured good marks on the SkillRack platform at Sri Sairam Engineering College.
- ✔ **Mentor Award** Presented in appreciation of my valuable mentorship and active participation during the 6th Technovation Hackathon organized by Shradhaa University, Greater Noida from January 21 to January 26, 2025.
- ✔ **Best Paper Award** received in recognition of outstanding research and presentation at the International Conference on Computing and Communication Technologies (ICCCT'25), organized by Sri Sairam Engineering College on April 16th and 17th, 2025.
- ✔ **NPTEL Discipline Star Award** received in recognition of exemplary performance and dedication in successfully completing NPTEL courses, awarded by NPTEL.
- ✔ **NPTEL Motivated Learner Award** received in recognition of consistent enthusiasm, dedication, and commitment to lifelong learning through NPTEL courses.
- ✔ **YUVA ACHARYA Award** Received from Bharat Education Excellence Award 2025.

PROFESSIONAL MEMBERSHIP

- IEEE-99449212
- ISTE-358148- Lifetime Member

SARASWATHY S