

Dr Sumalatha Aradhya

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Education

	Degree	Year	Institute	Specialization
1	Ph.D	2019	R V College of Engineering, VTU	High Performance Computing
2	M Tech	2006	MVJ College of Engineering, Bengaluru	Computer Science and Engineering
3	B E	2000	Dr Ambedkar Institute of Technology, Bengaluru	Computer Science and Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	27 th September 2024 Till date	Associate Professor	Siddaganga Institute of Technology, Tumkur-3
2	1 st August 2019 to 26 th Sep 2024	Assistant Professor	Siddaganga Institute of Technology, Tumkur-3
3	2 nd Nov 2016 to 31 st July 2019	Technical Officer	CEDLabs Pvt. Ltd, Tumkur
4	15 th Jan 2015 to 31 st Oct 2016	Lead Engineer	Quest Global Pvt. Limited, Bangalore
5	4 th Aug 2011 to 29 th July 2013	Assistant Professor	Raja Rajeshwari College of Engineering, Bangalore
6	02 nd Feb 2008 to 31 st May 2010	Technical Lead	HCL Technologies Ltd., India, Bangalore
7	May 2007 to 31 st Jan 2008	Project Lead	L&T Infotech, Bangalore
8	07 th Nov 2005 to 30 th April	Software Engineer	IntelliNet Technologies India Pvt. Ltd

	2007		
9	2 nd Oct 2002 to 31 st July 2004	Lecturer	M V J College of Engineering, Bangalore
10	June 2000 to 1 st Oct 2002	Lecturer	SBMSIT, Bangalore

Positions held

- During Tenure at RRCE, Bangalore:
Worked as International Conference Convener, FAIST 2013, held at RRCE, Bangalore
Worked as DCS, VTU Examination, 2012 to 2013
- During Tenure at SIT, Tumakuru:
Panel of exam preparation for theory & lab, Member for BOE & BOS, NBA coordinator, Mini project coordinator, Main Project Convener, Institution Biometric coordinator, Institution Squad Member, Lab coordinator, AICTE Activity Point coordinator, IIC-TBI council member, Smart India Hackathon SPOC for Institute, Browse Event Management Conveno etc.
- Judge of Technosium Project Exhibition Event, SSIT, 2025
- Founder and Director, Saraaga Agri Robo Tech Pvt. Ltd, Siddaganga TBI, SIT, Tumakuru - A faculty start up, Date of Incorporation- 19th April 2023

Affiliations of Professional organizations

- IEEE , CSI membership
- IEANG - International Association of Engineers membership
- CSTA – Computer Society Teachers Association membership

Awards and Honors

- **Elevate Startup Karnataka 2021 award** under Amrutha StartUp Scheme
- **Certification of Appreciation** for efforts towards Continuous Improvement mindset at Quest Global, Bangalore during 2016
- **Best Tutor Award** from Raja Rajeshwari College of Engineering, Bangalore during 2013
- **Best Lecturer Award** from MVJ College of Engineering, Bangalore during 2003
- **Certificate of Academic Excellence** for securing Merits in M Tech during 2005

Courses Taught

Undergraduate Courses

- Internet of Things
- Software Engineering
- Unix and Shell Programming
- Web Programming
- Operating Systems
- Computer Organization
- High Performance Computing
- Analysis and Design of Algorithms
- C, C++ Programming
- Java Programming
- Mobile Application Development
- Computer Networks
- Compiler Design
- Advanced Algorithms

Postgraduate Courses

- Advances in IoT
- Advanced Software Engineering

Research Areas

- Internet of Things,
- Edge Computing,
- High Performance Computing,
- Data Analytics, Business Intelligence
- IoT Vulnerabilities and Security
- Remote Sensing
- Twin Technologies
- Drone Technologies and Security
- Wireless Underground sensor networking
- RFID Technology, Sensors
- Cloud Computing and Security
- AI in IoT, Cloud
- Cyber Security

Sponsored Projects

Ongoing Projects:

1. Title: Energy Revenue Management System for **MESCOM**
Funding Agency: CED Labs Pvt. Ltd, Tumkur
Amount: Rs. 8 lakhs INR

Duration: May 2025 to Feb 2026

Role: PI

2. Title: Hybrid Robot for IoT Based Smart Agriculture with AI/ML

Funding Agency: **DBT, BIG-21, BIRAC**

Amount: Rs. 50 lakhs INR

Duration: May 2023 to Dec 2025

Role: PI

Completed Projects:

1. Title: Map Design

Funding Agency: CEDLabs Pvt. Ltd., Tumakuru

Amount: Rs. 1,80,000/-

Duration: June 2024 till Oct 2024

Role: PI

2. Title: Veots – bid adieu to fake products

Funding Agency: KSJ Rudh Pvt. Ltd. , Bangalore

Amount: Rs. 5.80,000/

Duration: May 2022 to May 2023

Role: PI

3. Title: Data Rack Management System

Funding Agency: CEDLabs Pvt. Ltd., Tumakuru

Amount: Rs.40,000/

Duration: Nov 22 to Jan 2023

Role: PI

4. Title: Active Page Creation

Funding Agency: CEDLabs Pvt. Ltd., Tumakuru

Amount: Rs.60,000/

Duration: Dec 2021 to Jan 2022

Role: PI

Publications

Journals

- Aradhya, S., HL, G., & Kumar, U. (2025). Attention Mechanism and Transformer Learning Based Protein Structure Prediction. International Journal of Intelligent Engineering & Systems – Q2 Journal, 18(4).
- Sumalatha Aradhya, "Remote Assistant Technology for Real Time Monitoring of the Agricultural Farmland across the Districts Using Smart Positioning IoT," SSRG International Journal of Electrical and Electronics Engineering – Q4

Journal, vol. 11, no. 9, pp. 112-127, 2024.
<https://doi.org/10.14445/23488379/IJEEEE-V11I9P110>

- Sumalatha Aradhya et al. Intrinsic Compilation Model to enhance Performance of real time application in embedded multi core system, International Journal of Engineering and Technology (IJET) – UGC journal, pp. 854- 864, Vol 10 No 3 Jun-Jul 2018
- Sumalatha Aradhya, N.K. Srinath, “Stack improving optimization feed with multi core task display interface,” International Journal of Computer Sciences and Engineering – UGC Journal, Vol.6, Issue.6, pp.1344-1349, 2018.

Conference Proceedings

- Aradhya, S., & Srinath, N. K. (2015, June). Proliferation framework on input data set to improve memory latency in multicores for optimization. In 2015 IEEE International Advance Computing Conference (IACC) (pp. 272-277). IEEE.
- Bhargav, Dn, A., Deekshitha, Talanki, S., Aradhya, D. S., & Thejaswini. (2021, August). An AI based Solution for Predicting the Text Pattern from Sign Language. In Proceedings of the 2021 Thirteenth International Conference on Contemporary Computing (pp. 341-348).
- Aradhya, S., Pramod, K. N., Rudraradhya, P., Kiran, B. A., & Kotresh, G. (2021, August). Conflict Management of Multi Modal RFID in Asset Tracking. In 2021 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT) (pp. 480-484). IEEE.
- Aradhya, S., Kumar, S., Rudraradhya, P., Thejaswini, S., & Soumya, A. (2021, June). Real Time Vehicle Tracking, Information Retrieval and Motion Analysis using Machine Learning. In 2021 International Conference on Intelligent Technologies (CONIT) (pp. 1-7). IEEE.
- Chayashree, K., Harshitha, U. K., Sayeed, M., Nagaditya, L. P., Aradhya, S., & Navada, K. S. (2022, October). Early Detection of Dry Eyes Through Blink. In 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT) (pp. 1-7). IEEE.
- Aradhya, S., & Navya, V. (2024, May). A Real time Application of Virtual Reality in Indian Agriculture. In 2024 International Conference on Smart Systems for applications in Electrical Sciences (ICSSSES) (pp. 1-6). IEEE.

Book Chapters

- Kaushik, N., Raju, C. G., Aradhya, S., Joshi, I., Indramma, M., & Radhika, K. R. (2022, December). Optimizing Beat Management System Using Soft Biometrics. In International Advanced Computing Conference (pp. 242-253). Cham: Springer Nature Switzerland.
- Soumya, A., Rao, K. S., & Aradhya, S. (2023, April). Generation of Historical Artwork Using GAN. In International Conference on Information and

Communication Technology for Intelligent Systems (pp. 485-497). Singapore: Springer Nature Singapore.

- Aradhya, S., Thejaswini, S., & Nagaveni, V. (2022). Multicore embedded worst-case task design issues and analysis using machine learning logic. In IOT with Smart Systems: Proceedings of ICTIS 2021, Volume 2 (pp. 531-540). Singapore: Springer Nature Singapore.
- Tanuja, V., & Aradhya, S. (2022). Positioning Based on Global Navigation Satellite System. In ICT Analysis and Applications (pp. 537-546). Springer Singapore.

Reviewer of Journal

- ACM Publications
- IEEE IAS Publications

Patents

- Published : Instrument to concurrently detect both near and far filed radio frequency Ref/No: 201941005190

Invited Lectures, talks and workshops

- An invited talk on Data Visualization and Analysis at department of CSE, RVCE, Bangalore during May 2025
- Conducted 5 days FDP Workshop on DevOps for Faculty, GIET, Gunupur, Odisha during December 2024
- An invited talk on What Industry Needs at Siddaganga Polytechnic, Tumkur on Machine Learning during Jan 2023
- An invited talk on Machine Learning at Siddaganga Polytechnic, Tumkur on IIoT during 2022
- An Invited talk on Industry Needs and Training aspects at Akshaya Institute of Technology, Coimbatore during May 2018
- Invited talk on Block Chain Technologies at JNCC, Shimoga, July 2021
- Invited Talk on User Interfaces UI/UX at Acharya Institute of Technology, Aug 21
- An Invited talk on Signaling System 7 - a Telecommunication Protocol Stack at M V J College of Engineering during October 2006