Gavina C.G. M.Tech. (Ph.D.)

Mail ID: gaveena7@gmail.com gavinacg.cs@sjcit.ac.in

Phone No.: 9901937508



Employment History

29/09/2021 to till date Currently working as an Assistant Professor in the Department of Computer Science and Engineering at SJC Institute of Technology, Chikkaballapur, with over 7 years of teaching experience, along with pursuing a part-time Ph.D. at Visvesvaraya Technological University (VTU) in the areas of Image Processing, Artificial Intelligence, and Optimization. My research focuses on developing innovative computational methods to address complex engineering challenges, with expertise in AI-driven intelligent system design, automated image analysis, and data-driven decision-making. I am skilled in academic instruction, curriculum development, research supervision, and fostering interdisciplinary collaboration. Sincerely committed to institutional accreditation activities, I also actively mentor and guide students, providing career counseling to support their academic and professional growth. I aim to contribute meaningful research and high-quality teaching that translates academic concepts into real-world solutions.

2019 -2021 Assistant Professor, as in the Department of Computer Science and Engineering, East West College of Engineering, Yelahanka, Karnataka, India. (Affiliated with VTU)

2018–2019 Assistant Professor, as in the Department of Computer Science and Engineering, SHA-SHIB College of Engineering, Chikkaballapur, Karnataka, India. (Affiliated with VTU)

Education Details

2021 – To date **Ph.D. Visvesvaraya Institute of Advanced Technology (VTU),** Belagavi, Karnataka, India.

Thesis title: "Predicting Cutting Tool Life using Image Processing" (Comprehensive viva-voce successfully completed)

2016 – 2018 ■ M.Tech. Computer Science and Engineering, Visvesvaraya Institute of Advanced Technology (VTU), Mudenahalli. Affiliated with VTU. Belgaum, Karnataka, India.

Thesis title: "Multipath routing in LLNs using Contiki OS."

2013 – 2016 ■ **B.E., Computer Science and Engineering,** Nagarjuna College of Engineering and Technology, Devanahalli. Affiliated with VTU. Belgaum, Karnataka, India.

*Thesis title: "Interoperability issues in multi-disciplinary wireless access technologies."

Research Publications

Journal Articles

- "Tool Health Monitoring in Lathe Turning Process by Artificial Intelligence Techniques

 A Review." Published in Concurrent Engineering: Research and Applications (CERA).
 (Scopus)
- 2. "A Smart Manufacturing Framework for Tool Wear Analysis and RUL Estimation using Multimodal Deep Learning "Submitted on 30/04/2025. (Under Review)
- 3. "Hybrid ANN-LOA for Tool Wear Prediction and Process Optimization in Intelligent Machining," submitted on 02/08/2025. (Under Review)

Skills

□ C programming, Artificial intelligence, Machine learning, Deep learning, Discrete mathematical structure, Digital electronics, Computer organisation.
 □ Jupyter, Minitab, Python, MATLAB, Origin lab, LAB VIEW Simulation Software.

Misc. Academic research, Teaching, Training, Consultation, and Publishing.

Key Areas of Expertise

- Career Development & Student Training.
- Industry-Academia Collaboration.
- AICTE activity point program Mentoring

Personal Development Courses

Workshop Attended: -

- "Sources of Research Grants and Art of Writing a Research Paper" organized by RLJIT on 3rd June 2021
- 2. "Conference Organizers Workshop", IEEE Bangalore Section, 16th May 2021
- 3. "Write Research Article Using LaTeX" organized by Aditya College of Engineering,

- 4. "Entrepreneurship Skill, Attitude and Behaviour Development" organized by SJCIT on 25th Feb 2022
- 5. Session on Achieving Problem-Solution Fit & Product-Market Fit" organized by SJCIT on 10th March 2022
- 6. "Mobile Application Development" organized by SJCIT from 7th to 9th April 2022
- 7. "Fine Tuning of NEP Compliance Syllabus under CSE Board of VTU",20th April 2022
- 8. "Data Analysis in SPSS" workshop organized by Commacade, 9th-10th December 2023

FDP Attended: -

- 1. Machine learning from Jan 28th to Feb 1st 2025, MAHE.
- 2. AI and Security, online FDP organized by SJCIT.
- 3. Feel Communication Training organized by SJCIT.
- 4. Full Stack Development from 15th-19th April 2024. HKBK.
- 5. Latest Trends and Techniques in Software Engineering from 20th to 27th Jan 2024. Christ University
- 6. Emerging Technologies from 11th-15th Dec 2023, TCS
- 7. Introduction to Python Programming and its Applications from 13th-17th March 2023, VTU Mudenahalli
- 8. Data Science and Machine Learning using Python from 4-8 July 2022, Edunet, MIT
- Art of writing Research Article and IPR level-2 from 20/09/2022 to 24/09/2022, SKIT.
 Object-Oriented Programming with Java Laboratory from 27th-29th October 2022, SKIT 9. Higher Education in the 21st Century in Light of National Education Policy 2020 from 7th-12th March 2022, Guwahati
- 10. Art of writing Research Article and IPR from 19/07/2021 to 23/07/2021, SKIT.
- 11. Machine Learning and Data Analytics Using Python from 27/04/2020 to 05/05/2020, IIT Roorkee.
- 12. Online Learning and Assessment System from 18/06/2020 to 22/06/2020, IEI Kalburgi.
- 13. Developing new perspectives in the era of AI/ML from 30/05/2020 to 04/05/2020, MIT.
- 14. Android Development with Kotlin Train-the-Trainer program from 14/09/2020 to 19/09/2020
- 15. Virtual Labs on 19/10/2020, VTU Belagavi.
- 16. An Overview of Teaching Techniques in Microcontroller and Embedded Systems from 20/01/2020 to 24/01/2020, Center of PG Studies, Mudenahalli.

Certification Courses

- 1. Research Methodology in NPTEL on Jan-Feb 2025.
- 2. DevOps in Infosys Springboard 2024
- 3. Three-part series of the Web of Science Certification Program, by Web of Science, March 2023
- 4. Machine Learning certification course from Skill Up on 20th August 2023
- 5. Problem Solving Through Programming in C from NPTEL on Jul-Oct 2022
- 6. Introduction to MATLAB from Great Learning on Jan 2023
- 7. Python for Data Science from IBM on July 12th, 2022
- 8. Python for Absolute Beginners from Udemy on April 18th, 2020
- 9. Python for Everybody: Five Domain Specialization from Udemy on April 4th, 2022

Industry/Research Collaboration

Collaborated with the Department of Mechanical Engineering, NITK Surathkal, on doctoral research in the Prediction of Cutting Tool Life using Image Processing. Executed machining experiments with integrated force, vibration, and temperature monitoring to build intelligent datasets. Applied AI and automation-driven frameworks for real-time tool condition monitoring and predictive maintenance in manufacturing.

Professional Memberships

1. Institution of Engineers (India) – AM1919027

Personal Details

Date of Birth: 13/03/1991

Sex: Female

Marital Status: Married

Linguistic Abilities: English, Kannada, Telugu,

Hindi.

Hobbies: Agriculture and Cattle farming, Active

Engagement in Research.

Permanent Address:

Gavina C.G.

S/o Gerigappa H.C.

Chikkapayalagurki Village, Chickballapur

District, Karnataka

India-562104

Declaration statement

I declare that the above information is accurate and correct to the best of my knowledge and belief.

[Gavina C.G.]

Place: Chickballapur Date:18-August-2025