

## Faculty Profile

Faculty Photo

### Brief Profile (Few Paragraphs)

I am Savitri Kulkarni, Assistant Professor at RV College of Engineering, Bengaluru, with over 15 years of experience. I hold an M.E. from UVCE and am pursuing my Ph.D. there. My teaching career includes roles at KLE Technological University and SJB Institute of Technology. My research focuses on computer vision, deep learning, plant disease detection, and quantum image processing. I have published in leading journals and conferences such as Intelligent Systems with Applications for coffee disease detection using CycleGAN, EfficientNetV2, and Quantum Fourier Transform. I am GATE-qualified and a recipient of the Best Paper Award for Face Detection using Fusion Features. I hold Elite+Silver NPTEL certifications in Cloud IoT and ML, ranking in the top 1% nationally in IoT. Academic excellence has been a consistent theme throughout my career.

### Personal Information

- **Name:** Savitri Kulkarni
- **Designation:** Assistant Professor
- **Department:** Computer science and engineering
- **Email:** savitrikulkarni@rvce.edu.in
- **Phone:** 8296050523

**Google Scholar / ResearchGate / LinkedIn:** [Link if applicable]/ **ORCID:**

1. <https://scholar.google.com/citations?user=Vxtg8DUAAAAJ&hl=en&authuser=2>
2. <https://www.researchgate.net/scientific-contributions/Savitri-Kulkarni-2252392832>
3. <https://orcid.org/0000-0002-5811-8162>

### Domain of Expertise

#### Research Focus

- **Primary Area:** AIML, Image processing, Deep learning
- **Allied Areas:**
  - AI in Agriculture
  - AI in Natural Language Processing

### Academic Qualifications

- **Ph.D.:** Pursuing, UVCE, Bangalore University
- **M.Sc/M.Tech:** M.E, UVCE, Bangalore University, 2010
- **B.E./B.Tech:** B.E, TCE, VTU

## Professional Experience

Name of the College	Dept	Duration	Designation
R V College of Engineering	Computer Science and Engineering	16/02/2024	Till date
KLE Technological University (BVB), Hubli	Master of Computer Applications	01/08/2023	02/02/2024
SJB Institute of Technology	Computer Science and Engineering	01/08/2019 To 30/06/2023	Asst Professor
City Engineering College	Computer Science and Engineering	08/08/2011 To 24/7/2019	Asst Professor
Yellamma Dasappa Institute of Technology, Bangalore	Information Science and Engineering	01/03/2010 to 04/08/2011	Lecturer

## Publications & Patents

### Journal Publications

1. Coffee plant disease identification with an attentive Multi-Image Segmentation Framework (MISF) with CycleGAN, S Kulkarni, PD Shenoy, KR Venugopal, Intelligent Systems with Applications (Q1), 200534)
2. Leaf Disease Identification and Remedy Recommendation Girish Savitri Kulkarni, Ravi Kiran, Bharat Prabhu, Manush International Journal of Science, Engineering and Technology 9 (4), 1-6
3. Gaze-based smart eye tracking system for password authentication, Savitri Kulkarni, Rajatha, International Journal of Innovative Research in Science and Engineering.
4. Internet Of Things: Interesting Information About Internet Technology, Protocols, And Applications, SMR, Savitri Kulkarni, Pooja J, International Journal of Computer Engineering and Applications 4 (1), 436-444
5. Knowledge-Based Face Detection Using Fusion Features ANS Savitri Kulkarni  
International Journal of Computer Engineering and Applications 3 (9), 100-105

### Conference Papers

1. Coffee plant disease identification using enhanced short learning efficientnetv2 S Kulkarni, NC Keerthi, CK Sunil, S Pal, S Dash, PD Shenoy, 2023 IEEE 20th India Council International Conference (INDICON), 91-96
2. Detection of coffee leaf diseases using DenseNet-264 and Slic segmentation S Kulkarni, HN Shravan, MV Veeresh, PD Shenoy, KR Venugopal 2023 10th IEEE Uttar Pradesh section international conference on electrical.
3. Offensive Sentiment Detection with Chat GPT and Other Transformers in Kannada Y Garani, S Joshi, S

Kulkarni, 2023 IEEE 2nd International Conference on Data, Decision and Systems (ICDDS).

4. CoffeeGan: An effective data augmentation model for coffee plant diseases S Kulkarni, P Deepa Shenoy, KR Venugopal International Conference on Data Management, Analytics & Innovation, 431-443

5. Automated Multiclass Classification for Ocular Disease Diagnosis Using Deep Learning S Kulkarni 2024 8th International Conference on Computational Systems and Information.

6. Coffee Plant Disease Identification Using Quantum Fourier Transform Image Processing and EfficientNetV2-S S Kulkarni, PD Shenoy, VKR 2024 IEEE 3rd International Conference on Data, Decision and Systems (ICDDS).

7. Innovative Approach to Detect Sugarcane Diseases with Discrete Fourier Transform and Deep Learning, S Kulkarni, 2024 IEEE 11th Uttar Pradesh Section International Conference on Electrical ...

8. Augmentation Model for Coffee Plant, S Kulkarni, PD Shenoy, KR Venugopal, Data Management, Analytics and Innovation: Proceedings of ICDMAI 2023 662, 431

### **Books/Book Chapters**

1. Revolutionizing Healthcare: The Impact of Augmented and Virtual Reality (AR/VR) Technologies, Wiley Publications.

### **Patents [Filed / Published / Granted]**

1. AI-Based Advanced Technique to Treat Domestic Sewage in Water Bodies and Real Time Monitor Using Sensor Integrated USV (Unmanned Surface Vehicle), Publication Date: 12/11/2021
2. Automated waste segregation with visual recognition, Publication Date: 13/09/2024

### **R & D Grants & Consultancy Projects**

NIL

### **Ongoing & Completed Research Projects**

NIL

### **Ongoing & Completed Consultancy Projects**

NIL

### **Professional Memberships**

1. ISTE -Lifetime Member
2. IFERP – Professional Member
3. IAENG-Lifetime Member

#### 4. IEEE Research Scholar membership

#### Awards & Recognitions

- i. Qualified for the GATE exam.
- ii. Presented a paper on “Knowledge-Based Face Detection Using Fusion Features” organized by K.S.S.E.M, Bangalore, Karnataka, and received the best paper award.
- iii. Completed the Cloud IoT Edge ML NPTEL course with an Elite+Silver certificate.
- iv. Completed the Google Cloud Computing Foundations ML NPTEL course with an Elite+Silver certificate
- v. Completed the CLOUD COMPUTING NPTEL course with an Elite+Silver certificate.
- vi. Completed the IOT NPTEL course with a Top 1% Ranking in a course certificate.
- vii. Completed the DEEP LEARNING NPTEL course with an Elite certificate.
- viii. Completed the Python for Data Science NPTEL course with an Elite certificate.
- ix. Completed the Introduction to Machine Learning NPTEL course with an Elite certificate.
- x. Topper for 3 consecutive semesters in M.E.

#### Student Supervision

- **Ph.D. Candidates:** [Number] ([X] Graduated)
- **M.Tech/M.Sc. Students:** [Number]
- **Undergraduate Research Mentees:** 07

#### Professional Roles

- **Reviewer for the conferences:**
  1. 9th International Conference on Computational Systems and Information Technology for Sustainable Solutions.
  2. 2025 12th International Conference on Emerging Trends in Engineering & Technology - Signal and Information Processing (ICETET - SIP 25)
  3. International Conference on Communication and Smart Devices
  4. IEEE Bangalore Humanitarian Technology Conference- 2025
  5. 8th International Conference on Computational Systems and Information Technology for Sustainable Solutions

- **Teaching**

#### Core Courses: [Current semester]

- Introduction to Cyber Security
- Universal Human Values

### **Advanced/Lab Courses:**

- Internet of Things and applications lab
- C programming lab
- Web Programming lab

### **Professional Roles**

### **Responsibilities**

- **Academic:** Exam unit coordinator

### **External Connect**

- Member of BoS / BoE / Academic Council / Governing Body, etc