HIRAG H

Bengaluru, Karnataka, India

website-080405.tech

Education

RV College of Engineering (RVCE)

Bengaluru, Karnataka

July 2024 - Present

Bachelor of Engineering in Computer Science

• Current SGPA: 7.52/10.0

• Relevant Coursework: Data Structures, Algorithms, Computer Networks, Database Management Systems

Diploma in Engineering

Completed 2024

Mechanical Engineering

2021 - 2024

• CGPA: 9.64/10.0 (Percentage: 88.9%)

• Consistent academic excellence with SGPA ranging from 9.11 to 10.0 across all semesters

Experience

Quality Control Engineer Intern

January 2024 - April 2024

Globe Tech Fortune Industries Pvt. Ltd.

Bengaluru, Karnataka

- Demonstrated exceptional learning agility by quickly mastering precision testing protocols and quality control procedures
- Consistently exceeded task completion expectations while maintaining high accuracy standards in all assigned projects
- Exhibited strong work ethic and proactive approach by actively seeking additional responsibilities and challenges
- Developed keen attention to detail and precision-focused mindset through hands-on quality assurance experience
- Collaborated effectively with cross-functional teams to ensure adherence to quality standards and delivery timelines

Technical Projects

V.E.C.T.O.R - Real-Time Fraud Detection System | Redis, Mongo DB, Java Script, Python

2025

- Developed enterprise-grade fraud detection system with real-time monitoring capabilities
- Implemented web dashboard for suspicious activity visualization and reporting
- Project details are confidential due to ongoing patent review process

AI-Driven Inventory Intelligence and Fulfillment System | Python, Machine Learning, API Integration

2025

- Developed comprehensive grocery inventory management system using ML models for demand forecasting and customer behavior analysis
- Implemented predictive assistant functionality that analyzes meal plans and festivals to trigger proactive restocking
- Integrated recipe APIs with personal inventory tracking to enable automated grocery procurement and waste reduction
- Built robust store-side intelligence engine for optimizing inventory levels, minimizing wastage, and improving stock turnover

Computer Vision Gesture Recognition Home Automation | Python, OpenCV, Arduino

2024

- Engineered contactless home automation system using computer vision and gesture recognition algorithms
- Implemented real-time gesture-to-command interface using OpenCV for seamless user interaction
- Integrated Arduino microcontroller for controlling household appliances through gesture-based commands
- Achieved high accuracy in gesture detection and response time optimization for practical home automation

Hospital Resource Management System | C Programming, Data Structures, Algorithm Design

2025

- Designed efficient emergency triage system using priority queues and dynamic resource allocation algorithms
- Implemented intelligent patient-doctor mapping based on medical specialization and urgency levels
- Optimized resource utilization through real-time tracking and automated assignment protocols
- Developed robust data structures to handle concurrent patient processing and doctor availability

Algorithm Visualization Platform | Python, PyGame, GUI Development

2025

- Created interactive visualization tool for pathfinding algorithms including A*, Dijkstra, BFS, and DFS
- Implemented user-adjustable parameters and scenario simulation interface for educational purposes
- Designed intuitive GUI with real-time algorithm execution and step-by-step visualization capabilities
- Enhanced learning experience through dynamic parameter adjustment and comparative algorithm analysis

Technical Skills

Programming Languages: Python, C, R (Basics), JavaScript

Machine Learning & AI: Computer Vision (OpenCV), Algorithm Design, Data Analysis, Fraud Detection Systems

Technologies & Frameworks: Redis, MongoDB, PyGame, Arduino, Git, GitHub

Design & Manufacturing: CATIA, Blender, FDM 3D Printing, LAM 3D Printing, Post-processing

Tools & Platforms: Cloudflare, Linux, Windows, Version Control

Databases: MongoDB, SQL

Specializations: Machine Learning Applications, Computer Vision, Algorithm Visualization, Quality Control

Leadership & Extracurricular Activities

Class Representative

2021 - 2024

Diploma Program

3 Consecutive Years

- Elected as Class Representative for 3 consecutive years, demonstrating exceptional leadership and peer trust
- Successfully managed class coordination, academic planning, and student-faculty communication
- Demonstrated strong interpersonal skills and ability to represent student interests effectively

Team Leader
Multiple Technical Projects

2024 - Present

Voluntary Leadership Role

• Voluntarily assumed leadership roles in all team-based technical projects, showcasing natural leadership abilities

• Excelled in team coordination, task delegation, and project timeline management

• Demonstrated exceptional communication and persuasion skills with faculty and stakeholders

Leadership Roles & Active Member

April 2024 - Present

Student Organizations

Multiple Verticals

- GDG RVCE Chapter (Machine Learning Vertical Lead Candidate): Leading ML project initiatives and community building since May 2025
- DHI Club (Operations Vertical): Active participant in operational planning and execution since 2025
- Studomatrix Organization: Contributing member in technical and organizational activities since April 2024

Volunteer Leader

2023

Rotary India Literacy Mission (RILM)

Project Sahakarita v2.0

- Recognized by RILM for outstanding contribution in Hardware and Software Installation during computer center setup
- Led team initiative for Rotary-Infosys Foundation-Government of Karnataka collaboration project
- Contributed to Department of Technical Education's digital infrastructure development for educational institutions
- Demonstrated technical expertise and community service commitment through hands-on system deployment

Key Achievements

Academic Excellence: Maintained CGPA of 9.64/10.0 in Diploma with consistent high performance across all semesters Patent Application: Developed V.E.C.T.O.R fraud detection system currently under patent review, demonstrating innovative technical capability

Leadership Recognition: Elected Class Representative for 3 consecutive years, candidate for GDG ML Vertical Lead position

Official Recognition: Received appreciation from Rotary India Literacy Mission for outstanding contribution to Project Sahakarita v2.0

Community Impact: Led successful community service initiative benefiting multiple educational institutions Industry Readiness: Completed professional internship with exceptional performance and positive feedback