

Education

D Y Patil International University

Bachelor of Technology in Computer Science and Engineering [SGPA 7.7]

Pune, Maharashtra

Aug 2023 - Present

- **Coursework :** Data Structure and Algorithm, Computer Organization, Computer Network, Database Management System, Digital Logic Design, Embedded Systems Design , System Software , Digital Communication.

Shri Shivaji Vidya Mandir

Higher Secondary Education [12th Boards 82%]

Pune, Maharashtra

Aug 2019 - May 2021

Significant Projects

Resume Screening Software

Sem4 - 2025

- A full-stack resume screening web application using HTML, CSS, JavaScript (frontend) and Node.js with MySQL (backend) to automate the extraction and filtering of candidate information.
- Implemented resume parsing and keyword-based filtering to assist recruiters in identifying relevant applications efficiently, reducing the need for manual review.

Hydrophonic Tower

Sem4 - 2025

- Designed a 5-layer vertical hydroponic tower in Fusion 360, each layer containing 4 compartments, enabling efficient growth of 20 plants in minimal space for urban agriculture.
- Implemented a motorized irrigation system with a timer-controlled adapter to automate nutrient delivery, enhancing plant health while reducing water and energy consumption.

Smart Attendance System

Sem3 - 2024

- Developed a secure and automated attendance system using ESP32, RFID (RC522), and fingerprint scanner (R307), eliminating manual errors and preventing proxy attendance.
- Integrated Google Sheets for real-time attendance logging and used C with Arduino IDE for microcontroller programming, ensuring tamper-proof and easily accessible records.

Shopping Cart Management

Sem3 - 2024

- Developed a Tkinter-based smart shopping cart application in Python, featuring a 0/1 Knapsack algorithm to suggest optimal item combinations based on user-defined budget and ratings.
- Implemented interactive features including dynamic sorting, budget validation, and real-time cart updates to enhance user experience and support efficient purchasing decisions.

Smart Classroom management

Sem3 - 2024

- Developed a smart classroom management web application using HTML, CSS, JavaScript, and Firebase, automating attendance tracking and faculty availability which reduced manual coordination by 50%.
- Integrated real-time lab occupancy and classroom scheduling with calendar syncing using Firebase as backend, enhancing resource utilization efficiency by 35% and minimizing booking conflicts.

Distance and motion monitor

Sem3 - 2024

- Built a distance and motion monitoring system using ESP32, HC-SR04 ultrasonic sensor, and I2C 16x2 LCD, achieving real-time object detection accuracy up to $\pm 3\text{mm}$ within a 4-meter range
- Enabled automated alert notifications through Wi-Fi using MicroPython, improving monitoring efficiency for smart home and security applications by reducing manual supervision by over 60%.

Flood Management System

Sem2 - 2024

- Assessed flood-prone rural infrastructure and proposed early warning systems and sustainable structural measures, contributing to improved local resilience and disaster preparedness.
- Collaborated with village authorities in Walve Khurdh to integrate advanced agricultural tools and biotechnology, enhancing flood mitigation strategies and promoting sustainable farming practices.

Smart Parking System

Sem2 - 2024

- Developed a microcontroller-based smart parking prototype with automated occupancy detection and real-time LED display updates, showcasing efficient hardware-software integration using Arduino Uno.
- Contributed to safer parking environments by implementing a feedback mechanism with IR sensors and LED alerts, reducing human intervention and increasing system responsiveness by 80% .

Skills

- **Languages:** Java , Python , C , C++ , DSA
- **Tools & Frameworks:** Mysql , Matlab , Cisco Packet Tracer , Fusion 360