

VRUTIK PATWA

+91-8355871961 vrutikpatwa@gmail.com LinkedIn GitHub Codeforces LeetCode Portfolio

Education

SVKM's Dwarkadas J. Sanghvi College of Engineering

Jan 2021 – 2025

Bachelor of Science in Computer Science

CGPA: 8.23

Prakash College of Commerce & Science

2021

HSC, Maharashtra (MHTCET Percentile: 98.8)

Percentage: 85.50%

Children's Academy

2019

SSC, India

Percentage: 79.20%

Relevant Coursework

- Data Structures
- Database Management
- Automata Theory
- Discrete Mathematics
- Operating Systems
- Computer Networks
- Algorithms Analysis
- Digital Electronics

Projects

CalcCanvas | Vite, React, FastAPI, MathJax, LaTeX |



- Built an interactive visual math canvas using React and MathJS to render, evaluate, and draw complex mathematical expressions.
- Integrated a FastAPI backend for LaTeX rendering and expression parsing; deployed seamlessly via Vercel.

WhatsApp Chat Analyzer | NLP, Streamlit |



- Developed a WhatsApp chat analyzer using Python to parse exported chat logs and extract insights like message counts, peak activity times, and user statistics.
- Built a clean Streamlit interface for user-uploaded chats with visualizations and sentiment analysis.

Parking Guardian | ReactJS, Tailwind CSS, Django, PostgreSQL, IoT |

- Developed a smart IoT solution using Raspberry Pi and u-blox modules to detect and display real-time nearby parking availability via Leaflet maps.
- Built a Django backend with PostgreSQL integration and anti-theft features, ensuring secure parking data transmission.

QuickChat | ReactJS, Tailwind CSS, ExpressJS, NodeJS, MongoDB, Socket.io |



- Built a real-time full-stack chat app with one-on-one conversations, persistent MongoDB message storage, and responsive UI.
- Used Socket.io for instant message delivery and ExpressJS + NodeJS for scalable backend APIs.
- Implemented user authentication, active user tracking, and message read status features.

Technical Skills

Languages: Python, C++, C, JavaScript, HTML/CSS, SQL

Tools: VS Code, Git, GitHub, Jupyter Notebook

Frameworks/Tech: React, Node.js, Express, MongoDB, Flask, Tailwind, OpenCV, Machine Learning, Deep Learning, NLP

Soft Skills: Problem Solving, Teamwork, Leadership, Mentoring

Leadership / Extracurricular

DJS Helios

Sept 2022 - Aug 2024

OpenCv developer & Mentor

- Mentoring a team of junior developers in utilizing OpenCV for image processing tasks, guiding them in algorithm implementation and optimization.
- Conducted training sessions and workshops on OpenCV fundamentals.

Achievements

- **Top 10 Finalist** – Manipal University DataThon: Developed a language prediction website using NLP.
- **Codeforces:** Pupil Rank (**Rating: 1255**)
- **LeetCode:** Solved **350+** problems, Current Rating: **1570**