

# PURNIMA SAHOO

Bhopal, Madhya Pradesh

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## Education

### VIT Bhopal University

Bachelor's in Computer Science and Engineering (B.Tech)

2022 – 2026

CGPA : 8.52

## Experience

### SWE Co-Op Intern | AlgoUniversity (YC S21)

July 2025 – Sept 2025

- Engineered an Online Judge web application for users to write, compile, and execute code with test case verdicts.
- Created responsive frontend using HTML5, CSS3, and JavaScript for optimal and seamless user experience.
- Integrated SQLite, with Django ORM providing efficient database queries and data validation between frontend forms and backend models. Implemented Docker for containerization and sandboxing, ensuring security and isolation.
- Deployed on AWS EC2 with Nginx reverse proxy and SSL termination for production, configuring Nginx to serve static files, handle SSL certificates, and proxy requests to Django backend.
- Integrated Google's Gemini AI model to provide intelligent code analysis, supporting 3 programming languages with comprehensive test case evaluation, achieving an average code submission latency of 5 seconds.
- Learned System Design from Senior Engineers from Google, Apple, Grab Singapore and Microsoft, prepared high level and low level design document.
- [Deployed Link](#)      [GitHub Link](#)

## Projects

### SkillCraft | ReactJS, Tailwind CSS, HuggingFace Transformers, GenAI

Dec 2024 – Jan 2025

- Designed an interactive user interface using React.js with Tailwind CSS, creating an intuitive and responsive learning experience that seamlessly integrates with AI-powered backend services.
- Employed lazy loading, optimized bundle size and ensured sub-100ms API response times for seamless experience.
- Architected a React 18 application with Vite and 15+ reusable components using component-based architecture.
- Selected as Finalist in prestigious Amdocs GenAI Hackathon 2024 among 1000+ participants nationwide.
- [Deployed Link](#)      [GitHub Link](#)

### Auto ML Solution | Python, Joblib, Pillow, Seaborn, Streamlit

Mar 2023 – Nov 2023

- Engineered an Automate Machine Learning platform (AutoML Solution) to eliminate manual algorithm rewriting, reducing model development time by 75% and streamlining machine learning workflows for production environments.
- Built preprocessing pipeline using Column Transformer and scikit-learn Pipeline classes, included PCA dimensionality reduction and created interactive visualization dashboard with Plotly/Seaborn for real-time model monitoring.
- Orchestrated 15+ algorithms, handling real-world data challenges, providing production ready model outputs.
- [Deployed Link](#)      [GitHub Link](#)

## Technical Skills

**Programming Languages:** C/C++, Python, JavaScript, Java (basic)

**Web Development:** HTML, CSS(basics), Django, Sqlite, MySQL

**Dev Tools & Platforms:** Git, GitHub, Google Workspace (Docs, Sheets, Slides), Excel, Streamlit

**Additional:** Hugging face Transformers, Scikit-Learn, Pytorch, TensorFlow, Keras, Computer Vision

## Extracurricular Activities

### Research and Development Lead | Linux Club, Cyber Warriors Club

Jan 2024 – Dec 2024

- Spearheaded cross-functional R&D initiatives across 2+ diverse teams, demonstrating strategic leadership.
- Reviewed weekly performance reports and audience demographics to plan monthly content calendars, while conducting bi-weekly team meetings to track project milestones and resolve bottlenecks.

### Smart India Hackathon | University Qualified Finalist

Nov 2023 – Dec 2023

- Built a fraudulent profile detection system for social media, securing pre-grand finale selection from 500+ teams.
- Collaborated effectively with a team of 4 members, applied robust machine learning algorithms that significantly improved detection accuracy and system performance.

## Achievements

- Programming:** Achieved an overall rating of 1500+ on competitive coding platforms.
- Coding Ninjas:** Recognized as a Top Performer in the "Introduction to C++" course with a 94% score.
- IBM AI Engineering Specialization (Coursera):** Achieved an overall score of 88.02% in the certification.