

# PURNIMA SAHOO

Bhopal, Madhya Pradesh

 +91 8766432185  purnimajagganathsahoo@gmail.com  linkedin.com/in/purnima-sahoo-61a566252/

## Education

### Vellore Institute of Technology

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

2022 – 2026

CGPA : 8.48

## 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.
- 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.

- [Deployed Link](#)    [GitHub Link](#)

## Projects

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

Jul 2025 - Sept 2025

- Engineered an Automate Machine Learning platform to eliminate manual algorithm rewriting, reducing model development time by 75% and streamlining machine learning workflows for production environments.
- Orchestrated 10+ algorithms, handling real-world data challenges, providing production ready model outputs.

- [Deployed Link](#)    [GitHub Link](#)

### FaceKey | Python, CNN, Numpy, scikit-learn, Pickle

Dec 2024 – Jan 2025

- Developed advanced machine learning models using TensorFlow and OpenCV for user authentication, enhancing login.
- Implemented blink detection using dlib's 68-point facial landmark predictor, calculating eye aspect ratio (horizontal/vertical eye dimensions) with threshold 5.7, achieving 90.91% validation accuracy on test set.

- [GitHub Link](#)

## Technical Skills

**Programming Languages:** C/C++, Python

**Web Development:** Django, Sqlite, MySql

**Tools & Platforms:** Git, GitHub, Jupyter Notebook, Streamlit

**Additional:** Machine Learning, Computer Vision, Hugging Face Transformers

## Extracurricular Activities

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

Jan 2024 – Dec 2024

- Led teams through project planning, requirement discussions, and milestone reviews.
- Facilitated knowledge-sharing sessions and guided juniors in understanding project expectations.

### 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.

## Certifications & Achievements

- Meta HackerCup (AI Track):** Secured Rank 116 globally in Meta's official AI-focused coding competition.
- 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.