Ashutosh Mahapatra

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EDUCATION

Siksha 'O' Anusandhan University (ITER)

Bachelor of Technology in Computer Science Engineering

Nov 2021 – June 2025

CGPA: 9.8

EXPERIENCE

Software Development Intern

Sep. 2022 – Present

Bhubaneswar, India

Aveti Learning Pvt. Ltd.

- Developed a cross-platform AI tutor bot mobile and web application using Flutter ensuring responsiveness; utilizing OpenAI GPT-4 model through Langchain as a backend service to enhance chatbot functionality.
- Implemented Question-Answering system using GPT-4 model, OpenAI embeddingsl; vector database.
- Orchestrated asynchronous RESTful APIs hosted on AWS EC2 with FastAPI and employed NGINX for scalable web server
- Engineered micro-services architecture for translating and converting PowerPoint slides to videos within 2-month timeframe, leveraging Docker on server-less AWS Lambda functions with SQS reducing operating cost by 90%; Integrated DynamoDB and CloudWatch for request status and error detection.
- Optimized the deployment processes through CI/CD pipeline and achieved a 50% time reduction via automation with Github Actions.

App Development Lead

Sep. 2023 – Present

Google Developer Student Club, ITER

Bhubaneswar, India

• Organised sessions on Flutter basics to more than 200 students and promoted best development practices

PROJECTS

Passlock & PasslockDesktop | Python, Firebase, Kivy, PyInstaller, Github Actions

Jan. 2022 – June 2022

- Created a cross-platform password manager for mobile and desktop (Android, Linux, Windows).
- Leveraged Firebase real-time database for efficient CRUD operations.
- Implemented AES-256 encryption to ensure robust password security and decryption.
- Designed real-time password synchronization system across devices with 0ms latency.
- Optimized app load time by 30% implementing lazy loading technique.

Plant Doctor | Flutter, Python, Flask, AWS, PyTorch

Feb 2023

- Collaborated with a team of four in a 36-hour hackathon to create a plant health monitoring solution.
- Designed and deployed ResNet ML model to achieve 90% accuracy rate in detecting plant diseases.
- Implemented offline (Raspberry Pi) and cloud-server data collection for 100% coverage.
- Integrated online marketplace for fertilizers and pesticides into the solution.

JalDristi (Smart India Hackathon) | Flutter, Python, FastAPI, MySQL

Sep. 2023

- Spearheaded a team of 6 during a 24-hour hackathon, developing a crowdsourced water-monitoring system.
- Utilized Flutter and employed the Provider package for state management to craft a Neumorphic and Stateful UI.

SKILLS

Languages: Python, Java, C, Dart, HTML, CSS, Assembly

Frameworks: Flutter, Flask, FastAPI, Kivy, Langchain, PyInstaller, NumPy

Tools and OS: Linux, UNIX shell, Bash, Git, SSH, Docker, Github Actions, Nmap, Wireshark

Cloud Platform: Google Cloud Platform, Amazon Web Services

Databases: Oracle DB, PostgreSQL, MySQL

ACHIEVEMENTS

Rated 1593 (1762 Max) in Codechef

Rated 1570 in Leetcode

Rated 1232 (Max) Pupil in Codeforces

Secured 4th rank in Capture The Flag contest conducted by NIT Rourlkela