Ashutosh Mahapatra

ashutoshmahapatra.13014@gmail.com | LinkedIn | GitHub

EDUCATION

Siksha 'O' Anusandhan University (ITER)

Bachelor of Technology in Computer Science Engineering

Nov 2021 – June 2025 CGPA: 9.85

EXPERIENCE

Member of Technical Staff

Feb 2025

Aveti Learning Pvt. Ltd.

Bhubaneswar, India

- Contributed to developing an EdTech platform adopted by 2700+ schools and 200K+ students, improving digital learning accessibility in vernacular languages and bridging the quality gap for global competitiveness.
- Architected microservices for PowerPoint-to-video conversion using serverless AWS Lambda with SQS (messaging queue) and S3 for storage, reducing operating costs by 90%

Software Engineer Intern

June 2024 - Dec 2024

Samsung R&D Institute

Bangalore, India

- Developed a static power analysis tool to identify performance bottlenecks and reduce power inefficiencies by 10%, leveraging in-house GenAI for optimization suggestions.
- Engineered an industry-first ground truth generation framework for ARM, achieving 91% accuracy in per-instruction energy measurement, with support for both hardware and software modes.
- Automated the build process for C/C++ using CMake, reducing compilation time by 70%.
- Created an automation suite using Python and Java for capturing and analyzing per-instruction power consumption, reducing ground truth creation time by 90%.

Software Developer Intern

Sep 2022 - May 2024

Bhubaneswar, India

Aveti Learning Pvt. Ltd.

- Developed a cross-platform AI tutor bot for mobile and web using Flutter, leveraging Langchain and OpenAI GPT-4 as a backend service.
- Integrated vector search, and Retrieval-Augmented Generation (RAG) for question answering (QA) in chatbot
- Optimized CI/CD deployment pipelines using GitHub Actions, reducing deployment time by 50%.

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, MacOS).
- Leveraged Firebase real-time database for efficient CRUD operations.
- \bullet 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.

SKILLS

Languages: Python, Java, C, C++, Dart, Assembly, LaTeX, Golang

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

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

Cloud Platform & Containerization: Google Cloud Platform, Amazon Web Services, Docker

Databases: Oracle DB, PostgreSQL, MySQL

ACHIEVEMENTS

Finalist in JP Morgan Chase Code For Good

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

Rated 1762 (Max) in Codechef

Rated 1713 in <u>Leetcode</u>

Rated 1232 (Max) Pupil in Codeforces