Ayush Chintalwar

9284361858 | Portfolio | Github | LinkedIn |
ayush.chintalwar1234@gmail.com

EDUCATION

MIT ADT School of Engineering, Pune   **Pune, India**
B.Tech. in Computer Science & Engineering   Sept 2022 - Current
Last Year (LY)   CGPA – 8.35/10

WORK EXPERIENCE

MIT ADT University & IS360 Technologies   **Pune, India**
Brain-Computer Interface (BCI) Intern   Jul 2023 - Dec 2023

- Worked on ADHD Rehabilitation Through Real-Time EEG-Based Neurofeedback and AI
- Researched EEG-based neurofeedback and Slow Cortical Potentials (SCPs)
- Developed machine learning models for EEG signal classification
- Integrated robotic interactions with real-time BCI data

ACHIEVEMENTS

Top 5 National Finalist – UST D3CODE Hackathon 2025   **Trivandrum, India**
UST Global   Sept 2025

- Ranked in the Top 5 nationally among 25,000+ participants and 6,500+ teams.
- Built an AI-powered analytics dashboard integrating advanced ML pipelines, real-time data visualization, and generative AI components.
- Led data augmentation and GAN-based synthetic data generation to address rare disease dataset imbalance, improving model performance and fairness.
- Designed a hybrid quantum–classical model combining CNN feature extraction with a variational quantum circuit (VQC) for enhanced generalization.
- Collaborated in a cross-functional team, delivering a scalable prototype under tight deadlines.

PROJECT EXPERIENCE

- DAIgnoQ: Developed a system for generating high-fidelity synthetic images for any rare-diseasse medical dataset using StyleGAN and Diffusion to address data scarcity and class imbalance. Designed an end-to-end pipeline where the synthetic data augments the real dataset, then trained a transfer-learning CNN and integrated a quantum variational classifier (VQC) on compressed embeddings, achieving improved minority class recall over classical baselines
- ADHD Rehabilitation Through Real-Time EEG-Based Neurofeedback and AI: Developed an AI-based robotic system for attention tracking and neurofeedback therapy
- Fuel-Aware Navigation: Designed a smart navigation solution using ESP32 and sensors that dynamically optimizes routes based on real-time fuel levels, ensuring efficient travel and preventing fuel shortages.
- SmartBot: Built an AI-powered robotic system using ESP32 and OpenCV for real-time object tracking, line- following, and autonomous intelligent tasks
- Chat-with-pdfs: An intelligent document analysis system that lets you interact with PDFs through natural conversations. By integrating the DeepSeek API and LangChain, this project enables users to extract insights, ask questions, and retrieve specific information from PDF documents in real time.
- AI-Powered Website Creation Tool: Frontend Builder is an AI-assisted web development platform built to simplify HTML website creation, editing, and deployment. Designed for both beginners and developers, the tool provides a smooth and interactive experience for building static sites, featuring real-time code editing and intelligent assistance.

SKILLS & INTERESTS

Languages: C/C++, Python.

Skills: Machine Learning, Regression Modeling, Natural Language Processing, Data Visualization, Streamlit, LangChain, MySQL, Arduino, ESP32, Microcontrollers, Hardware Prototyping, Arduino IDE, Git & GitHub, Power BI, Fusion360, SolidWorks, Unity, Generative AI, Prompt Engineering, Agentic Coding.

Soft Skills: Disciplined, Problem-solving, Fast Learner, Team Collaboration, Creative Problem Solving, Public Speaking (Improving), English, Japanese (N4).

Interests: Cycling, Gym, Tinkering with Electronics.

COURSES & CERTIFICATIONS

- Oracle Cloud Infrastructure 2025 Certified Generative AI Professional (Oracle)
- NPTEL Computer Vision
- ROBO-AI (MyEquation)
- Exploratory Data Analysis for Machine Learning (IBM, Coursera)
- Python and Statistics for Financial Analysis (HKUST, Coursera)
- Generative AI: Prompt Engineering Basics (IBM, Coursera)
- Generative AI Learning Plan for Developers (AWS)
- IBM Machine Learning Professional Certificate (IBM)
- Build Real World AI Applications with Gemini and Imagen (Google Cloud)
- Explore Generative AI with the Gemini API in Vertex AI (Google Cloud)