Vaishnav Mukund Mankar

+91 8668746433 | vaishnav.mankar04@gmail.com | linkedin.com/in/vaishnav-mankar | github.com/myselfmankar | myselfmankar.github.io

SUMMARY

Computer Engineering student (PICT, 2027) with hands-on experience building backend systems and AI-powered visualization pipelines for large-scale educational platforms. Skilled in Python, FastAPI, AWS, and Rust, with a focus on performance optimization, automation, and production-ready systems. Actively seeking remote software engineering internships (Europe / Singapore).

EDUCATION

Pune Institute of Computer Technology	Pune, India
Bachelor of Engineering in Computer Engineering; ***CGPA: 9.2***	*2023 – 2027*
Global Public School	Nashik, India
Class XII; ***Score: 80%***	*2023*
Ryan International School	Nashik, India
Class X; ***Score: 90%***	*2021*

EXPERIENCE

AI Developer Intern – Visualization (Remote) — Aug. 2025 – Present
Across The Globe

- Contributed to core visualization components of a large AI-driven pipeline that generates personalized educational videos in multiple Indian languages, including slide-based video synthesis, interactive code-rendering explanations, and diagram visualization.
- Optimized backend execution on AWS Lambda, reducing processing time from ∼20 minutes to ∼14 minutes (∼30%), and developed internal tools (Markdown-to-PDF, Mermaid architecture diagram generation with HTML rendering) to improve pipeline efficiency and developer workflows.

PROJECTS

Intelligent Digital Asset Management | *Python, FastAPI, TypeScript, PostgreSQL, SQL AI*

- Engineered a smart asset discovery system by integrating **AI-driven image tagging** and a **Text-to-SQL** layer, enabling complex natural language queries on unstructured media and eliminating manual metadata entry.
- Optimized SQL query performance for semantic search, ensuring low-latency retrieval for large asset datasets.

AI Architecture Diagram Generator | *Python, FastAPI, LangChain, Rust*

- Built a self-healing pipeline using Generative AI to automate system design diagrams, reducing creation time by **99%**.
- Integrated **Rust-based** components for speed and stability, ensuring consistent output quality.

Icon Search Engine | *Rust, CLI, Fuzzy Search*

- Developed a high-performance CLI tool for fuzzy searching over 30,000+ assets with sub-second latency.
- Designed for efficiency and speed to support high-throughput design workflows.

TECHNICAL SKILLS

Languages: Python, Rust, SQL (Postgres), TypeScript, JavaScript
Frameworks/Libraries: FastAPI, Flask, LangChain, React, Node.js
Cloud & DevOps: AWS, Azure, Docker, Git, CI/CD, Linux
Tools: Astral (uv, ruff), VS Code, Postman