Shreya Mhetre

Email-ID | Github-profile | Linkedin-profile | Portfolio

Education

Arizona State University   **Tempe, AZ**
Master of Science in Computer Science   Starting Fall 2025
Savitribai Phule Pune University   **Pune, MH, India**
Bachelor of Engineering in Computer Engineering   Aug 2020 - May 2024

TECHNICAL SKILLS

Languages & Frameworks: Python, C/C++ , HTML/CSS, JavaScript, TypeScript , ReactJs , NodeJS, Express.js, Flask, FastAPI, Stream lit , Bootstrap, MUI, Vite, ThreeJs
Developer Tools: Git, GitHub, Docker, Jenkins, Nginx, Swagger
Libraries: NumPy, Pandas, Matplotlib, Scipy, scikit-learn, TensorFlow, PyTorch, Keras
Database: Postgres, MySQL, Neo4J

EXPERIENCE

Equations Work – Software Engineer   March 2024 – June 2025
Prophesizer – AI-Powered Financial Forecasting Platform   Pune, India
Tech Stack: Babylon.js, Vite (Frontend) | Python Flask, Media-pipe, WebSocket (Backend)
- Built a 3D financial visualization interface using Babylon.js, improving user interactivity by **40%** through AR/VR and gesture-based controls (Media-pipe, WebXR).
- Integrated LLMs with voice recognition and article analysis backend, increasing prediction accuracy and user engagement for investors by **30%**.

Optimizer – Sustainable Data Solutions Tool
Tech Stack: React.js, Node.js, REST APIs
- Built Node.js backend APIs and React.js frontend UI to deliver CO_2 estimates and eco-alternatives, enabling 20% more efficient decision-making for sustainable materials management.
- Co-developed a comparison engine reducing environmental impact analysis time by **35%**, supporting sustainable choices for enterprise clients.

Equations Work - Project Intern   June 2023– March 2024
Web-based Image Annotation and ML Marketplace   Pune, India
- Developed an image annotation tool within an ML platform, enabling users to upload images and download annotations in XML/TXT formats, increasing annotation efficiency by **30%**.
- Integrated advanced AI/ML models including **YOLOv8**, **Grounding Dino**, and **Segment Anything Model**, boosting object detection accuracy by **25%** and enhancing overall user experience.

S2R2 Technologies – Web Developer   January 2023- April 2023
Internship   Pune, India
- Conducted UI testing and implemented client-required frontend enhancements, improving website usability and performance.
- Designed and implemented a Python script for efficient data extraction and storage using PostgreSQL

PROJECTS

AI-Research Assistant using Agentic RAG | *Python, LangChain, React.js, pgvector, Docker, CrewAI* | **Github-Link**
- Built an AI-powered research assistant using **Agentic RAG architecture**, where autonomous agents (via **CrewAI**) collaboratively handle document parsing, retrieval, and academic query resolution.
- Enabled key functionalities like multi-turn Q&A over research papers, smart summarization, MCQ generation and semantic search for references and related content.
- Utilized **LangChain**, **Gemini API**, **Python**, **React.js**, **pgvector**, and **Docker** to implement a scalable, full-stack, vector-based research assistant.

SmartCue | *Python, React.js, FastAPI, PostgreSQL, Gemini API, Material UI* | **Github-Link**
- Engineered a task management system to streamline workflows by integrating GitHub issues, Calendar, and an AI assistant. Leveraged a custom **Model Context Protocol (MCP)** inspired by Anthropic's documentation to ensure efficient and structured communication with external services.
- Designed the backend using FastAPI, PostgreSQL, and Python, integrating APIs for GitHub. Built the frontend with React, Material-UI, and React Big Calendar, emphasizing responsive design and intuitive user experience.
- Implemented advanced features like **AI-driven task** creation using the Gemini API, **real-time GitHub issue synchronization** via webhooks, and a **custom meeting calendar** with dynamic event styling and interaction capabilities, showcasing strong AI integration and data handling skills.