Shubhayan Srivastava

213-910-4667 | shubhaya@usc.edu | linkedin.com/in/shubhayan935 | github.com/shubhayan935

EDUCATION

University of Southern California   Los Angeles, CA
Bachelor of Science in Computer Science   *Aug. 2023 – Dec 2026*
- Relevant Coursework: Data Structures and Algorithms, Discrete Mathematics, C++ Programming

EXPERIENCE

Founder   Jan. 2024 – Present
Hera   *Los Angeles, CA*
- Founded Hera, an **analytics tool that analyzes air pollutant** data down to the neighborhood level and **suggests the best solutions** to policymakers to reduce air pollution in their area
- **Launched in 15 cities**, improving 45,000+ lives in 2 months
- Developed a **search-driven analytics** system using **OpenAI** and **prompt engineering techniques**, presented in a **ReactJS dashboard**

Software Engineer Intern   May 2024 – Present
ThoughtMinds   *San Francisco, CA*
- Developed an **AI debugging agent**, reducing bug identification time by 170%
- Implemented **multi-agent architecture using LangGraph** to efficiently locate bugs across codebases
- Containerized agent using **Docker** to streamline CI/CD pipelines and enable easy scalability
- Utilized **GPT-4o function calling API** to compare previous bug reports, providing bug fixes aligned with clients' code style guides

Undergraduate Research Assistant   Jan 2024 – May 2024
University of Southern California   *Los Angeles, CA*
- Developed ML models using VADER and BERT to **predict stock market prices from social media posts**
- Restructured algorithm using AutoTriggER to improve sentiment analysis and entity recognition accuracy by 27%

EV Data Analytics Center Lead   Sept 2023 – May 2024
USC FormulaE Team   *Los Angeles, CA*
- **Led a team of 5 engineers** to optimize vehicular performance through data analysis of automotive tests
- **Built a C++ dashboard** to display car metrics, communicating with the Vehicle Control Unit via mirocontrollers

PROJECTS

College Dining Hall Meal Planning App | *Flutter, Node.js, Firebase, TensorFlow.js*   Jun 2024 – Present
- Developed a mobile app using **Flutter** with a **Node.js** backend, incorporating Firebase Authentication and external APIs for real-time dining hall menu and nutrition data
- Created a **recommendation engine** using **TensorFlow.js** to provide personalized meal suggestions based on users' nutritional goals, as well as **learn users' personal taste over time**
- Currently **beta testing** with 20 users across USC and University of Michigan

Personal AI Assistant iOS App | *SwiftUI, Python, Flask, OpenAI, Pinecone, Firebase*   Feb 2024 – Feb 2024
- Developed iOS app with an **empathetic AI bot** with long-term memory (RAG) using **SwiftUI** and **OpenAI**
- Implemented **Google OAuth** to integrate with users' Google Calendar for **automated scheduling and reminders**
- **Conducted user testing** and collected feedback on 15 users, making data-driven improvements to user experience

TECHNICAL SKILLS

Languages: JavaScript, Python, TypeScript, C/C++, SQL (Postgres), Swift, Golang
Frameworks: ReactJS, NodeJS, ExpressJS, Flask, SwiftUI, SciKit-Learn, PyTorch, TensorFlow, Pandas
Developer Tools: Git, XCode, Firebase (Auth, Firestore, Storage, Functions, Analytics, Crashlytics), MongoDB Atlas, OpenAI, Pinecone, LangChain, Neo4j, Figma, Supabase, Jira, VS Code, Jupyter Notebook, URM/UML Diagrams, UI/UX Design, State Management, Local Storage, Cloud Storage (GCP, Azure, AWS), Prompt Engineering