# Shubhayan Srivastava

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#### **EDUCATION**

## University of Southern California

Aug 2023 – May 2027

Bachelor of Science, Computer Science

Los Angeles, CA

#### EXPERIENCE

# Hera (heradashboard.vercel.app)

Jan 2023 – Present

Founder

Los Angeles, CA

- Founded Hera, an AI-powered analytics tool that analyzes air pollutant data through natural language prompts, allowing local government officials to "talk" to their data and derive insights
- Launched in 15 cities, improving 45,000+ lives in 2 months
- Built AI agent that understands prompts, writes SQL queries and Python code that run in a sandbox to analyze structured and unstructured data, and provides insights and visualizations

**ThoughtMinds** 

May 2024 – Aug 2024

Software Engineer Intern

San Francisco, CA

- Developed a debugging agent for the company's AI copilot product, reducing bug identification time by 170%
- Implemented multi-agent architecture using LangChain to efficiently locate bugs across codebases
- Created Python scripts to analyze logger files and Jira, providing fixes aligned with clients' code style guides

#### Information Sciences Institute, USC

Jan 2024 - May 2024

Undergraduate Research Assistant

Los Angeles, CA

- Assisted Prof. Fred Morstatter and 3 PhD candidates in the Operational Collective Intelligence project
- Built and fine-tuned NLP models using VADER and BERT to predict stock prices from social media posts
- Restructured algorithm using AutoTriggER to improve sentiment analysis and entity recognition accuracy by 27%

## CLUBS & ORGANIZATIONS

## TroyLabs (Startup accelerator)

Sep 2024 - Present

Software Engineer

• Consulting as a Software Engineer for Recei, a fintech startup in the Fall '24 cohort

## SEP (USC's premier startup society)

Jan 2024 - Present

Mentor, Product Engineer

• Mentoring cohort members as they learn new skills, build software products, and launch startups

### Projects

### **Smart Dorm Room Automation**

Sep 2024 – Present

- Automated my dorm room's blinds, door lock and lights using Arduino and Servo Motors
- Built AI system to control automations and my Google Calendar via voice through Llama 3.1 hosted on AWS
- Developed mobile app using SwiftUI to interface room automations via Bluetooth

# College Dining Hall Meal Planning App

Jul 2024

- Developed a mobile app with Node.js and Flutter, scraping external APIs for dining hall menu and nutrition data
- Created a recommendation engine using TensorFlow to provide personalized meal suggestions based on users' nutritional goals and personal tastes, providing curated meals in under 1 second

## Personal AI Assistant iOS App

Feb 2024

- Developed iOS app with an agentic chatbot with long-term memory (RAG) using SwiftUI and OpenAI
- Implemented Google OAuth 2.0 to integrate with 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: Python, TypeScript, JavaScript, Java, C++, SQL (Postgres), Swift, Go

Frameworks: React, Next. is, Node. js, Express, Flask, SwiftUI, SciKit-Learn, PyTorch, TensorFlow, Pandas

Developer Tools: Git, Cloud Computing (GCP, Azure, AWS), Firebase, MongoDB, RESTful API, FastAPI, Pinecone,

LangChain, Apache Spark, Kafka, Neo4j, Figma, Jira, VS Code, Jupyter Notebook, Prompt Engineering