SAAHIL MEHTA

saahilm30@gmail.com <> Austin, TX

linkedin.com/in/saahil-mehta saahilmo6 <a href=

EDUCATION

University of Texas at Austin, Bachelor of Science in Computer Science

Graduating 2028

Relevant Coursework: Data Structures, Discrete Math, Computer Architecture, Linear Algebra, Statistics and Probability, Multivariable Calculus, Differential Equations, Operating Systems

EXPERIENCE

Software Development Project Lead

2025.05 - Present

Texas Instruments

Dallas, TX

- Engineered real-time fall detection on TI IWR6843 radar using a lightweight **ONNX** model, achieving 95% accuracy with sub-50ms latency.
- Developed and trained a **PyTorch** classifier to distinguish human from object falls, enhancing safety responsiveness.
- Deployed a production-ready FastAPI pipeline to transmit event alerts to client interfaces.

Software Engineer Intern Suits

2024.08 - Present

Austin, TX

- Crafted intuitive mobile UI with **Figma** and **React Native**, improving usability and visual consistency.
- Built a **GPT-3.5 RAG pipeline** that improved chatbot response relevance by 40%.
- Predicted payment likelihood using logistic regression in **scikit-learn**, achieving 85% accuracy on real-world data.

AI Quality Assurance Intern

Efficienergi Consulting

2023.06 - 2023.09

Mumbai, India

- Delivered a fully offline **AI chatbot** to parse technical manuals and answer employee queries autonomously.
- Leveraged LangChain, Docker, and HTML/CSS to ensure modularity and offline compatibility.
- Cut query response time by 40%, significantly boosting internal support efficiency.

PROJECTS

Debate Bot. Created a real-time AI debate assistant for speech-to-rebuttal interactions.

- Streamed live audio using WebSockets, transcribed via Whisper, and responded with Coqui TTS.
- Integrated Brave Search API with FAISS vector indexing for on-the-fly contextual rebuttals using GPT-3.5.

Volatility Predictor. Built a financial news-based NLP pipeline to forecast market volatility.

- Embedded headlines using Google XLNet and analyzed tone with NLTK sentiment classification.
- Enabled early identification of market shifts based on sentiment-driven volatility estimation.

Equity Signal Engine. Designed a backtestable trade signal system using supplier-customer linkages.

- Mapped equity relationships from public data using **networkx**; retrieved price data with **yfinance**.
- Engineered backtesting suite with **pandas**, achieving a 12% alpha over 6 months.
- Visualized trends with **Matplotlib**, aiding investment decision-making.

EXTRA-CURRICULAR ACTIVITIES

Texas Convergent — Engineer at UT Austin's student-led tech incubator

- Engineered full-stack web and mobile applications for startups and nonprofit clients using React and Firebase.
- Increased product adoption by designing features that led to over 5,000 user downloads.

SKILLS

Programming Languages Java (Proficient), Python (Proficient), C (Proficient), C++ (Proficient), SQL

Frameworks & Tools Firebase, AWS, Git, Whisper, Coqui TTS, WebSockets, LaTeX, Linux

Soft Skills Communication, Leadership, Team Collaboration, Problem Solving, Adaptability