Ishan Shah

(972) 832-9598 | ishan0102@utexas.edu

ishanshah.me | github.com/ishan0102 | linkedin.com/in/ishan0102

EDUCATION

The University of Texas at Austin — Aug 2019 – May 2023
B.S. Electrical and Computer Engineering, B.S.A. Mathematics, Minor in Business — *GPA: 3.95*

- **Selected Coursework:** Machine Learning, Data Science, Computer Vision, Natural Language Processing (**TA**), Operating Systems, Algorithms, Data Structures (**TA**), Blockchains, Stochastic Processes, Probability, Linear Algebra

EXPERIENCE

Google — May 2022 – Aug 2022
Software Engineering Intern — *San Bruno, CA*

- Designed a new throttling strategy for YouTube's ML queue to prevent latency for 2m+ classifications per second.
- Built mechanism letting users throttle traffic to classifiers to keep video/comment inference throughput consistent.
- Created a service that updates an ML monitoring dashboard for 800+ YouTube classifiers with 50+ internal users.
- Deployed a cron job on Kubernetes that runs the updater daily, saving on-call engineers 5+ minutes per incident.

Capital One — May 2021 – Aug 2021
Software Engineering Intern — *Plano, TX*

- Developed an NLP pipeline that uses Google Reviews from 16k+ car dealerships to predict future fraud incidents.
- Trained logistic regression and naive Bayes models on 12m+ TF-IDF vectorized reviews and past fraud incidents.
- Presented 8 technical demos to 100+ engineers and saved internal risk analysts 2 hours per dealer, a 90% speedup.

AAK Telescience — May 2020 – Aug 2020
Software Engineering Intern — *Davis, CA*

- Wrote Flask web apps to match 100k+ researchers with research opportunities based on keyword similarities.
- Implemented a desktop app to extract and transfer keywords from user documents to the web server using Electron.
- Built dynamic web pages that process and render SQL data on a modern UI using AJAX, Jinja, and Bootstrap.

PROJECTS

Pictionary — Jan 2022 – May 2022

- Trained an RNN with TensorFlow on Google QuickDraw (50m+ sketches) to classify drawings with 40% accuracy.
- Explored modern neural network architectures, image classification algorithms, and efficient data streaming.

Commentary — Jan 2022 – May 2022

- Created a model that predicts the sentiment of a tweet's replies and deployed it with FastAPI and GCP (2k+ uses).
- Built a pipeline that fetched 34k+ tweets from Twitter's API and applied pre-processing and TF-IDF vectorization.

PeerNet — Jan 2020 – Dec 2021

- Developed a community-focused tutoring platform for schools that lets students give and receive class-specific help.
- Created a Google Classroom-like interface for resource sharing and a tutor messaging system powered by Twilio.

ORGANIZATIONS

IEEE UT Austin | *Corporate Director* — Sep 2019 – May 2022

- Organized workshops with 20+ companies (Optiver, Apple, etc.) to give 200+ members tech industry insights.
- Gave talks on technical interviews and resume writing and maintained a script to automate corporate outreach.

UT Human-AI Interaction Lab | *Research Assistant* — Aug 2021 – Dec 2021

- Calculated rates of return to homelessness in Austin by age, race, gender, etc. of 4k+ individuals with Pandas.
- Worked with The Salvation Army and ECHO to mitigate homelessness inequity for marginalized groups.

SKILLS AND HONORS

Languages: Python, Java, JavaScript, C, C++, Protocol Buffers, LaTeX, SQL, HTML, CSS

Tools: AWS, GCP, Git, Docker, Kubernetes, gRPC, MongoDB, Firebase, Flask, Node.js, React, Next.js

Machine Learning: Scikit-learn, TensorFlow, NLTK, NumPy, Pandas, Jupyter Notebook

Honors: Bostick Endowed Scholarship in ECE, HKN Scholarship, IEEE Scholarship (2x), DaVita PM Hackathon (1/25), International Switch Energy Case Competition (4/250), College Scholar (2x), Daily Texan Publications (7x), Eagle Scout

Interests: Startups, Linguistics, Coffee Shops, Bouldering, Sand Volleyball, National Parks, Crossword Puzzles