Utkarsh Nigam

(469) 910-6913

joshnigam99@gmail.com

Github | **Devpost** | **LinkedIn** | **Web**

M.S. Computer Science (Intelligent Systems), University of Texas at Dallas. ***GPA: 3.8/4.0***
B.S. Computer Science, *B.S.* Mathematics, University of Texas at Austin. ***GPA: 3.77 /4.0***

EXPERIENCE

Master's in Computer Science, UT Dallas — *AI/Intelligent Systems*
JULY 2025 - EST. AUG 2026 GRADUATION

- Current full-time student with graduation expected in August 2026.

Bloomberg, New York City — *Software Engineer (Trading Systems)*
JULY 2022 - JUNE 2025

- I worked with an infra team that owns a highly-critical, legacy database serving **~400 million requests** daily, storing client trades.
- My highest impact project was **migrating a monolith** (in C/Fortran) that served enterprise data (Bloomberg's top products) via FIX/XML APIs to clients, to a new microservice-architecture, leveraging **C++20 (concepts & ranges), Java17**'s **Reactive API** which reduced tech-debt, redundant I/O, looser coupling, improved maintainability, and most importantly, **improving latency per request by about 10x.**.
- Part of a multi-org effort to support new business-critical features such as **T+1 settlement migration** (see here) by

  (i) delivering an internal change in our ticketing system

  (ii) adding a new RLE-based data-compression layer to fix broken workflow

  (iii) synchronizing meetings with product, QA, and engineering teams to ship to production under tight deadlines.
- The data-compression **increased network-throughput** by compressing raw database-records being sent over the wire by **17x.**
- Made an impact outside of immediate work by cultural involvement in **philanthropy, interviewing candidates (top 5% interviewer), contributing to our Q&A interview bank, and mentoring new-grads and interns** through Bloomberg entry-level mentoring program.

Tangle, Austin — *Part-time Developer*
MAY 2021 - NOV 2021

- I was in charge of developing the frontend, API, and backend from near scratch, using the **MERN** stack and **SCRUM** process. Designed a front-end using **RESTful APIs** and API routing.
- Developed the frontend using Expo CLI and ReactNative and connected it to the AWS-hosted backend via Python's SQLAlchemy API.

AIVIS.AI, Bay Area — *Machine Learning (CV) Intern*
JUNE 2021 - AUG 2021

- I was tasked with the project of tracking the popularity of certain goods at certain retail stores, to be solved using computer vision.
- Designed, integrated, and deployed to beta a deep-learning merchandise detector, classifier, and tracker on AWS Cloud, using YOLO v5.

Community Labs, San Antonio — *Software Automation Engineer*
NOV 2020 - JAN 2021

- Community Labs conducts **Covid-19 testing** mainly in San Antonio and receives thousands of customer queries during peak hours.
- Built tools and 2 microservices to **assist the customer support team** using Google's **AppScript, Python**, and OAuth frameworks within **NodeJS.**
- Automated tools **reduced** customer service workload by **~70%**

SKILL OVERVIEW

- ***Languages:*** *Java, Python3, C++, C, Groovy, Bash4.0, TypeScript*

- ***Backend Software:*** *Apache Kafka, RabbitMQ, Some Camel*

- ***Tooling:*** *Git, DPKG (RHEL), CMake, SubVersion, Humio, Splunk, gdb, CLion, IntelliJ, Apache Maven*

- ***Frameworks:*** *GTest, GMock, Spring, SpringBoot, Junit, PyTest, Jakarta*

- ***Misc:*** *Writing GitHub Wiki Docs, markdown enthusiast, active listener*

NOTABLE PROJECTS

HackTX: Speech-based classifier
OCT 2021

Wrote a neural network to classify emotion from speech deployed on the cloud with an Electron frontend, using RESTful APIs with a team of 5 - all within 24 hours. Check my work here! (Repositories)

UT ML & Data Science Project
APRIL 2021

Rigorously analyzed & presented a case study on "Spotify's next marketing step" by analyzing listener data upto 2019, using ScikitLearn and Pandas.

LXD Open Source Contribution
DECEMBER 2021

Resolved issues (like this one) on the Linux Containers (LXD) open-source project, part of my Virtualization course.

MISCELLANEOUS

Relevant coursework

- Data Structures, Networks, OS, Architecture, Virtualization, Distributed Computing, NLP, Neural Networks
- CppCon 2023 attendee, Concurrency in Java taught by Dr. S (Java Champion)

Key Distinctions

- 81st **Putnam** Contest: Finished in the top 33%
- University-Endowed Presidential Scholar Award at UT Austin

Hindi Native fluency
French Conversational fluency