# KRUSHAY BHAVSAR

# **EDUCATION**

**Georgia Institute of Technology** – GPA: 3.95/4.00, Faculty Honors

Atlanta, GA

B.S. in Computer Science / Concentration in Information Internetworks & Cybersecurity

Dec 2026

- Relevant Coursework: Systems & Networks, Computer Networking, Design & Analysis of Algorithms, Computer Organization & Programming, Data Structures & Algorithms, Statistics & Applications, Discrete Mathematics, Linear Algebra
- Clubs/Activities: GT Experimental Rocketry, Outdoor Recreation @ GT Bikepacking Staff, Startup Exchange, Intramural Soccer

#### **SKILLS**

Programming/Markup Languages: TypeScript, JavaScript, Python, Java, SQL, R, MATLAB, C, C#, HTML, CSS, SCSS, XML Frameworks/Libraries: React.js, Node.js, Express.js, Java Spring, Google Guice, Google Guava, JUnit5, Django, Flask, Redux Tools: PostgreSQL, Amazon Web Services (Cognito, EC2, ECS, ECR, S3, Lambda), PowerShell, Linux, Firebase, Git, Android Studio

### **EXPERIENCE**

### Wealthfront, Automated Investing Firm

Palo Alto, CA

Backend Software Engineer Intern – Trading Infrastructure Team

May 2025 - Present

- Designed and implemented a low-latency trade order pricing system for low-liquidity, wide bid/ask spread instruments to improve allocation prices for over 1.4M trades daily and reduce order cancellations by >5% using Java, Hibernate, and MariaDB
- Authored and presented in-depth technical design documents with historical incident analysis, UML diagrams, and code-level insights to the VP of Engineering & senior leadership to deploy the optimized pricing system across trading infrastructure
- Automated the pruning of stale trade account data via batch processing jobs on Apache Airflow, removing over 600K rows
  daily and 40M+ rows of data total to improve query performance and ensure high concurrency for account processes

# Vertice AI, Financial Technology Startup

Durham, NC

Associate Software Engineer Intern

Jun 2024 – Aug 2024

- Developed an analytics solution using React.js, Python, PostgreSQL, Express.js and AWS technologies to assist credit unions
  in tracking growth/engagement and identifying marketing opportunities for specific members
- Automated the generation of transaction models by implementing a component-based system with vectorized full-text search to analyze member behaviors, resulting in a 40% reduction in code volume and a 50% improvement in runtime efficiency
- Devised predictive models to **efficiently analyze over \$5 billion** in member transactions, track spending trends, and categorize members for partnered credit unions to know, grow, and measure their overall membership

### Jane Street Capital, Quantitative Trading Firm

New York, NY

Academy of Math and Programming Fellow

Jul 2023 - Aug 2023

- Designed and implemented algorithmic solutions to complex problems in **game theory**, **graph theory**, **and linguistics** using Python, enhancing skills in data analysis, decision-making under uncertainty, and quantitative trading strategies
- Achieved 7th place in Jane Street's Electronic Trading Challenge (ETC) by developing high-frequency trading algorithms in a competitive 6-hour trading session, resulting in one of the highest Profit-and-Loss (P&L) scores among 80+ participants
- Collaborated with International Math Olympians to complete intensive coursework in combinatorics and number theory

#### Mentor Labs, Harvard Technology Startup (acquired)

Boston, MA

Software Engineer

Aug 2021 – Apr 2022

- Developed a full-stack application using **React.js**, **Express.js**, **Java Spring**, **PostgreSQL**, **and AWS** services to assist thousands of high school students in the college admissions process via a virtual guidance counselor and summer program recommendations
- Implemented a matching algorithm for scholarship/summer programs and leveraged React.js to create a seamless UX on the landing page, dashboard, scholarships, and summer programs pages, resulting in a 25% increase in user retention
- Contributed to a cross-functional development team while following the Agile Scrum methodology and establishing weekly team goals/timelines, leading to a **global user base of over 10,000 students** and incubation at the Harvard Innovation Labs

#### **PROJECTS**

### Mission Control Software, Attitude Determination and Control System (ADCS)

Embedded C, Python, SQLite, Grafana, Controller Area Network Protocol (CAN)

Aug 2024 – Present

- Developed low-latency backend systems integrated with Featherweight altimeters for real-time rocket telemetry analysis, along with a data visualization dashboard for the Ground Systems Team at Georgia Tech Experimental Rocketry (GTXR) Club
- Implemented the Controller Area Network (CAN) Protocol using the STM32H7 hardware abstraction layer to ensure high-speed communication with flight systems as a core member of the Avionics Team

#### Signslate

https://github.com/krushaybhavsar/signslate

Python, Flask, React.js, JavaScript, HTML, CSS, Deep Learning, Web Scraping

Jun 2021

- A real-time translation web application that translates American Sign Language (ASL) to English and vice versa using deep learning and web-scraping techniques on a Flask backend server and React.js frontend
- Used a pretrained 3D CNN and REST APIs to translate ASL video gestures input by the users to English words
- Awarded 1st place at the Simplihacks Hackathon (200+ participants) and High Tech Hacks Hackathon (100+ participants)

# **CERTIFICATIONS & AWARDS**

Certifications/Courses: Introduction to IoT (Cisco), Introduction to Cybersecurity (Cisco), Practical Introduction to Quantum-Safe Cryptography (IBM), Basics of Quantum Information (IBM), CodePath Advanced Technical Interview Prep Honors/Awards: 1st Place SimpliHacks Hackathon (international), 1st Place High Tech Hacks Hackathon (international), 2x Wolfram Alpha Award Winner, 1st Place KIPR Robotics Competition (national), Valedictorian of Secaucus High School