

KRUSHAY BHAVSAR

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EDUCATION

Georgia Institute of Technology – GPA: 4.0/4.0, Faculty Honors **Atlanta, GA**
B.S. in Computer Science / Concentration in Information Internetworks & Cybersecurity Dec 2026

- **Relevant Coursework:** Systems & Networks, Design & Analysis of Algorithms, Computer Organization & Programming, Data Structures & Algorithms, Discrete Mathematics, Objects and Design, Linear Algebra
- **Clubs and Activities:** GT Experimental Rocketry, Outdoor Recreation @ GT Bikepacking Staff, GreyHat Cybersecurity Club, 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, JUnit5, Django, Flask, GraphQL, Redux, Pandas, NumPy
Tools: PostgreSQL, Amazon Web Services (Cognito, EC2, ECS, ECR, S3, Lambda), PowerShell, Linux, Firebase, Git, Android Studio

EXPERIENCE

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 Intern 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**
Senior Software Developer 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) Aug 2024 – Present
Embedded C, Python, SQLite, Grafana, Controller Area Network Protocol (CAN)

- 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

Tutor Connect <https://tutorconnect.sboe.org>
React.js, TypeScript, JavaScript, HTML, CSS, Firebase Jul 2022 – Sep 2022

- A cloud-based networking platform to connect students with verified tutors within the Secaucus Board of Education
- Designed and implemented a site with a student dashboard (for filtering, searching, and connecting with listed tutors), a tutor dashboard (for managing tutor listings and connections), and an admin dashboard (to allow invited administrators to manage user permissions, verify tutors, and track tutoring progress) used by 500+ students and 60+ verified tutors daily

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