KRUSHAY BHAVSAR

EDUCATION

Georgia Institute of Technology – GPA: 4.0/4.0, Faculty Honors

Atlanta, GA

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

May 2027

- Relevant Coursework: Design & Analysis of Algorithms, Computer Organization & Programming, Data Structures & Algorithms, Discrete Mathematics, Objects and Design, Linear Algebra
- Clubs and Activities: GT Experimental Rocketry, Trading Club at GT, GreyHat 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, React Native, Node.js, Express.js, Java Spring, 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 **Python, PostgreSQL, React.js, 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 **Java Spring**, **PostgreSQL**, **React.js**, **Express.js**, 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

Accel Learning, Tutoring Center

Secaucus, NJ

Python Tutor

Nov 2020 – Aug 2021

- Mentored over 10 students worldwide in Python by exploring both fundamental and advanced concepts, enhancing their programming proficiency and sparking a lasting interest in computer science.
- Developed an engaging, project-based Python curriculum for high school and middle school students, leading to its adoption by the tutoring center and receiving **100% positive feedback** from students and parents
- Guided students in creating **over 15 Python projects** using PyGame and Matplotlib, providing hands-on experience and enhancing their programming proficiency

PROJECTS

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), 1st place

Kiss Institute of Practical Robotics (KIPR) Botball Competition (national), Valedictorian of Secaucus High School