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 Cybersecurity & Information Internetworks

May 2026

- Relevant Coursework: Design & Analysis of Algorithms, Computer Organization & Programming, Data Structures & Algorithms, Discrete Mathematics, Objects and Design, Linear Algebra
- Clubs and Activities: GreyHat Cybersecurity Club, GT Experimental Rocketry, Trading Club at GT, Startup Exchange, 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: Docker, PostgreSQL, Amazon Web Services, PowerShell, Linux, Firebase, Git, Jira, Android Studio, Unity

EXPERIENCE

Vertice AI, Financial Technology Startup

Durham, NC

Associate Software Engineer Intern

Jun 2024 – Aug 2024

- Developed an analytics solution using **Python, PostgreSOL, React.is, Express.is 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

Cisco Systems, Technology Cooperation

New York, NY

Summer Extern

Jul 2022

- Participated in a highly selective program (~10% out of 900+ applicants) to gain industry experience in **Cybersecurity and IoT**
- Formulated and presented innovative solutions for mass transit challenges using Cisco technologies such as Meraki MR56 Camera systems, LoRaWAN, and CyberVision, resulting in increased rail ridership and enhanced rider safety
- Achieved NYC Extern of the Day by excelling in workshops, shadowing company executives, and demonstrating leadership and technical skills in IoT, AI/ML, and Meraki Solutions, among various other networking technologies

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, is 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

Privalink

https://github.com/krushaybhavsar/privalink

React.js, TypeScript, Express.js, AWS (RDS, EC2, S3, Cognito), Cryptography

Aug 2024 - Present

- Implemented a secure file encryption and transfer system using elliptic curve cryptography (ECC) to ensure the confidentiality of sensitive data, with private keys encrypted client-side for zero-knowledge security
- Developed customizable self-destructing links for file sharing, utilizing AWS infrastructure (S3, EC2, RDS) and cryptographic processes to enable secure, temporary access to encrypted files without exposing key information

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

Docker, Embedded C, Python, SQLite, Grafana

Aug 2024 – Present

- Implemented a 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 at Georgia Tech Experimental Rocketry (GTXR) Club
- Developed low-latency backend systems integrated with Featherweight altimeters for real-time rocket telemetry analysis, along with a data visualization dashboard for Mission Control as part of the Ground Systems Team

CERTIFICATIONS & AWARDS

Certifications/Courses: Introduction to Cybersecurity (Cisco), Practical Introduction to Quantum-Safe Cryptography (IBM), Introduction to IoT (Cisco), 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