

EDUCATION

- **University of Texas at Austin** Austin, TX
Bachelor of Science in Computer Science *Aug. 2017 – May 2021*
Coursework: Data Structures, Computer Architecture, Software Engineering, Operating Systems, Network Security
- **KTH Royal Institute of Technology** Stockholm, Sweden
Study Abroad *Jan. 2020 – May 2020*
Coursework: IT Design for Disability, Search Engines and IR Systems, Haptics, Tactile and Tangible Interactions

EXPERIENCE

- **Microsoft** Redmond, WA
Software Engineer *Aug. 2021 – Present*
 - Performed operational duties and implemented bug fixes to maintain a CodeSigning service that handled over 10 billion signing requests annually.
 - Used Change Feed feature of Azure's Cosmos DB to provide a persistent record of activity in a team service and keep multiple regional databases in sync with one another.
 - Migrated existing telemetry to use OpenTelemetry API, and improved the storage size and readability of logs.
 - Documented new hire onboarding process to alleviate permissions issues and undocumented processes.
- **Microsoft** Remote
Software Engineering Intern *May 2020 – Aug. 2020*
 - Learned fundamental concepts about digital signatures, asymmetric encryption, digital certificates, and public key infrastructures.
 - Built a command-line application to extract signature metadata from digitally signed files.
- **State Street** Austin, TX
Cloud Security Intern *Jun. 20219 – Aug. 2019*
 - Used Burp Suite to discover multiple vulnerabilities in existing services and built programs to exploit them.
 - Created an automated security testing suite that scanned for vulnerabilities in open ports and source code using ReactJS and Flask.
 - Built a tool that would monitor network traffic and report unencrypted data using Python and Scapy.

PROJECTS

- **NYT Crossword Search Engine**
 - Created Python script to scrape and aggregate NYT crossword data, implementing multithreading to complete 1000+ web requests 7.5x faster than the default Python performance.
 - Used Javascript to build an inverted index, mapping crossword clues, answers, and dates to crosswords that they are associated with.
 - Used NextJS to create an API that allows performant querying of the inverted index, and a React frontend that allows user input and visualizes search results.

PROGRAMMING SKILLS

- **Programming:** Javascript, Python, C#, Java, SQL
- **Web Development:** HTML/CSS, ReactJS, NodeJS, NextJS, Express, SCSS, Flask
- **Technologies:** AWS, Azure, GCP, Burp Suite, Git, Heroku, Burp Suite