KEY SKILLS

- Languages: JAVA, JavaScript, TypeScript, Python, HTML, CSS, C++, C, C# and SQL.
- Libraries & Frameworks: React, Node, Flask, Spring Boot, SASS, Bootstrap
- Testing: Jest, Junit & Postman
- DevOps: AWS Management Console, AWS CDK, Travis CI, Webpack, Docker & GitHub Actions
- Tools: GitHub, Git, NPM, JIRA, Code Climate, ZenHub, and Slack.

EXPERIENCES

SOFTWARE DEVELOPMENT ENGINEER, SunPower Corporation (Bellevue, WA)

Apr 2023 - Present

- Worked with the engineering team, PMs and UI Designers in designing and developing a dynamic, React-based Loan and Lease Origination System that streamlines customer solar financing. The system currently processes about \$25 million of funds/year and serves thousands of customers across the continental U.S.
- Designed and implemented an API Key authentication system enabling our APIs for 3rd party client usage.
- Helped the team design and launch RBAC in our system for users using our Loan and Lease Origination System.
- Designed and implemented data validation over large data models, thus increasing overall security for request payloads.
- Designed and implemented modular schemas to reduce code duplication by 20% and make it more maintainable.

SECURITY ENGINEER, Amazon (Bellevue, WA)

July 2022 - Apr 2023

- Created an ML-based anomaly model to identify users with an unusual number of HTTP requests.
- Designed and implemented a system to cluster security issues in a date range.
- This feature will help security engineers prioritize solutions focusing on top risks in Alexa, reducing turnover time by 50%.

SECURITY ENGINEER INTERN, Amazon (Bellevue, WA)

May 2021 – Aug 2021

- Designed and implemented an intelligent sampling model for data loss prevention.
- The ML model helped to catch clusters, which can result in data loss 99% of the time, thus reducing the overall risk by 99%.
- The initial pilot projected cost savings of **\$270k/month** for the service team.

WEB DEVELOPER, Honors Dept. (Fort Collins, CO)

Sept 2019 – May 2022

- Maintained and updated the website with various online services with over 1700 daily active users.
- Designed and implemented the online process for the Formal Thesis, which was previously based on papers.
- The front end uses MojoPortal and Bootstrap & the back end uses .NET and MS SQL Server.

RESEARCH ASSISTANT, CS Dept. (Fort Collins, CO)

Aug 2019 - Jan 2022

- Inspect data quality from six organizations through our tool to find anomalies.
- Upgrade **Python** code to improve the efficiency of the tool based on the inspection results.
- Worked on a tool that can find faults in data accurately without consulting the client, thus saving 2-3 days of the client's time.
- One of the four authors of the <u>paper</u> published at the IEEE Big Data 2020 conference.

CYBERSECURITY INTERN, Cybersecurity Center (Fort Collins, CO)

May 2020 – May 2021

- Worked with Fort Collins Energy Department to find businesses and households that showed suspicious behavior.
- Used Long Short-Term Memory (LSTM) autoencoder tool & SQL Queries to analyze data for anomaly detection.
- This helped the Fort Collins Energy Department locate faulty equipment in the city.

TA (SWE & Computer Organization), CS Dept. (Fort Collins, CO)

Jan 2020 – May 2021, Jan – May 2022

- Attained students' team meetings to help them with their daily scrum.
- Refined course content to make it more accessible to students & taught two labs a week consisting of 20 students.
- Worked as a system admin to maintain grading servers so that there were no downtime issues.

EDUCATION

Bachelor of Science in Computer Science (Summa Cum Laude) with Mathematics Minor

University Honors Scholar

GPA: 4.0

Colorado State University (CSU), Fort Collins, CO

PROJECTS

TRIP PLANNER (React, Java, CSS, GitHub, Node.js & NPM) (More info can be found here)

- Created a single page, mobile application, and microservices similar to Google Maps, where users can plan a trip.
- Semester-long project in a team-based Agile software development environment.

MULTIPLAYER CHESS GAME (React, Java, CSS, GitHub, Node.js & NPM) (More info can be found here)

- Create a mobile responsive, single-page Multiplayer Chess game with microservices.
- In this chess game, users can create an account and log in to play the game with other users.
- Passwords were hashed before storing, and the entire system ran on Authentication Token.