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 to create a dynamic, React, and Java-based end-to-end Loan and Lease Origination System to streamline solar financing. This system is used by thousands of customers across the continental U.S., handling more than \$25 million annually.
- Designed and implemented an API Key Management and Authentication system enhancing accessibility and security for thirdparty client interactions.
- Led the end-to-end development of a significant feature (Change Order), from initial requirement gathering with the product team through design and implementation to finishing with a successful production release.
- Contributed to the design and rollout of Role-Based Access Control (RBAC) in the Loan and Lease Origination System and Internal Ops Dashboard, benefiting thousands of users.
- Contributed to the design and rollout of an OTP-based Authentication system to streamline the user application process, eliminating the need for account creation.
- Implemented Launch Darkly across more than 10 microservices to streamline the management of new feature releases.
- Optimized code maintainability by 20% by designing and implementing modular schemas, effectively reducing redundancy.
- Implemented robust data validation mechanisms for large-scale data models, fortifying security across request payloads.

SOFTWARE 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%.

SOFTWARE 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.

FULL STACK SOFTWARE 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 C#, .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.

EDUCATION

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

Colorado State University (CSU), Fort Collins, CO

GPA: 4.0

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.is & NPM) (More info can be found here)

- Create a mobile responsive, single-page Multiplayer Chess game with microservices.
- Implemented secure user authentication with hashed passwords & Auth Tokens for seamless gameplay between users.