

PROGRAMMING SKILLS

- **Languages:** Python, Java, JavaScript, PHP, TypeScript, C/C++, SQL
- **Technologies:** AWS, Elasticsearch, MySQL, PostgreSQL, React, Docker, Unix/Linux, Node.js

EXPERIENCE

- **Mastercard Technologies Canada ULC (NuData)** Vancouver, BC
Senior Software Development Engineer Aug 2018 - Present
Technologies Python, PHP, Java, Groovy, Elasticsearch, MySQL, AWS
 - **Embedded DevOps/SRE:** Responsible for reliability and operation of dashboard service and distributed backend services responsible for ETL jobs processing millions of transactions/day. Migrated services from a monolithic repository/pipeline to separate repositories and pipeline and reduced time required to deploy new changes from weeks to days. Built and maintained build infrastructure for Python services. Helped automate manual regression testing, reducing # of hours required to deploy a change by 50%.
 - **Customer Dashboard Development:** Implemented new feature to allow users to view and download reports generated by automated reporting system, included collaborating across multiple teams to identify, investigate and fix issues. Worked as part of the Dashboard team to refactor legacy code, as part of Dashboard re-architecture project.
- **Perked, Inc.** Vancouver, BC
Software Engineer, Intern May 2017 - Aug 2017
Technologies TypeScript, Node.js, MongoDB, React, Redux, JavaScript, Docker
 - **User Action Flow Tracking:** Designed and implemented end-to-end user tracking as the sole developer. Collected events from various event streams, cleaned and stored the raw data for analysis. Integrated the raw data with user data to identify and diagnose user errors.
 - **Admin Command Line Tools:** Refactored existing Admin Command Line tools to move from JavaScript to TypeScript and make the codebase more functional. Added additional functionality to the tools to simplify and make the admin actions more efficient.
- **MDA Corp.** Richmond, BC
Junior Software Developer, Co-op May 2016 - Dec 2016
Technologies C#, JavaScript, ColdFusion, Sitefinity, IIS, Windows Services, MSSQL
 - **Job Board:** Designed and created the job board to be used for the corporate and the internal sites as the sole developer. Replaced a legacy job posting system with a responsive and modern job board with input and feedback from multiple stakeholders across Canada. Integrated 3rd party data feed to create the corporate job board. Implemented user location based job sorting for the internal board. Created XML feeds for external job aggregators.
 - **Corporate Website:** Planned and updated the corporate website to be mobile responsive as a part of a 2 person development team. Responsible for creating test environments and setting up staging sites. Assisted Marketing team with French localization. Improved website performance and made the code base more readable and reduced redundancy.

PROJECTS

- **Nintendo Entertainment System (NES) Emulator:** Implementation of the MOS 6502 CPU. Implemented an interpreter in C# to read and execute software originally written for the NES.
- **DevDash:** Application integrating Trello and Github to visualize and manage Github issues. Implemented using .NET Core with integrations for Trello and Github API. Deployed to Azure Web App Service and SQL Database.
- **City Simulator:** Team lead for the Networking team. Implemented JSON-RPC and asynchronous networking for server and clients (Unity & HoloLens). Integrated server, database and networking team projects and deployed project to Azure.
- **Slack Chatbot:** Created a slack chatbot for conducting surveys using TypeScript and Node.js. Surveys conducted using multiple option and text responses. Implemented response validation, summarizing and displaying survey results through slack.