

Matthew Kim

4B · COMPUTER ENGINEERING

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🔧 Skills

Languages Python, JavaScript, Java, Groovy, C++, SQL, Bash, Swift, MATLAB, VHDL

Web HTML, CSS, NodeJS, Express, React, Redux, RESTful API

Tools/Concepts AWS, Git, Docker, Kubernetes, Agile, MVC, Mongo, Elasticsearch, Drools, Spring, Android Studio, Jenkins

🌐 Experience

Sumo Logic

Redwood City, CA

SOFTWARE ENGINEER, INFRASTRUCTURE

Sept. 2019 - Dec. 2019

- Created a Kubernetes-based load-testing tool for HTTP APIs to evaluate performance at peak times such as the Super Bowl.
- Built the back-end NodeJS server to be hosted on an EKS Cluster, creating parallel pods to generate loads up to 1 GB/sec.
- Leveraged React to create an interactive front-end to start load tests while displaying test history and metrics pulled from S3.
- Effectively implemented docker files to push images to AWS ECR, and added security to HTTP endpoints through API keys.
- Additional Project: leveraged Netflix's Edda to create a caching solution to prevent throttling due to constant AWS API calls; deployed using AWS CloudFormation and Fargate.

IBM Canada

Toronto, ON

SOFTWARE ENGINEER, FULL STACK

Sept. 2018 - Dec. 2018

- Effectively used Mongo, Express, and NodeJS to implement the back-end of a conversational banking mobile app POC.
- Built the front-end of an internal web application using ES6 JavaScript, React, Redux, and CSS3 as per design specifications.
- Support in the work of an augmented reality iOS app involving object sharing between devices using AR Cloud and Swift.
- Made positive impact on stakeholder demos and agile workflow by encouraging daily scrums and retrospectives each week.

UXP Systems, an Amdocs Company

Toronto, ON

BACK-END DEVELOPER

Jan. 2018 - Apr. 2018

- Independently designed and developed Java / Groovy classes on the enterprise platform using Spring and IntelliJ IDEA.
- Expertise in the JUnit and Spock framework for integration testing. Concept of Behaviour Driven Development was used.
- Frequent use of Git to manage version control / migration of multiple projects. Strong familiarity with the Agile environment.

PointClickCare

Mississauga, ON

JAVA DEVELOPER

May 2017 - Aug. 2017

- Wrapped a Drools Rule Engine into a MVC-based, Spring Boot REST API web service with over 200 rules and a client API.
- Used JMeter / VisualVM for load testing, ensuring CPU usage was under 5% and controlling garbage collection at 100 reqs/sec.
- Expertise in using the ELK Stack (ElasticSearch, LogStash, Kibana) for log analysis, graphs, and dashboards to present data.

PointClickCare

Mississauga, ON

AUTOMATION ENGINEER

Sep. 2016 - Dec. 2016

- Effectively made use of the Page Object and Page Test Design Pattern to improve code quality and extensibility in Spring.
- Independently automated end-to-end test cases to reduce manual regression tasks on QAs through Selenium Web Driver.
- Initiated lunch-and-learn sessions to teach Java concepts and automation to full-time QAs with no prior coding experience.

⚙️ Selected Project

NHL Play by Play Data Scraper

Toronto, ON

LEAD MEMBER

Aug. 2018

- A back-end application that takes play by play data from the NHL's public stats API using JavaScript and NodeJS.
- Commands are executed through Powershell and scrapes JSON data into .csv format to easily analyze large sets of data.
- Data can be filtered into specific players details and events for each individual game for every NHL season up to 1917-18.
- Managed all task priorities, design decisions, development, and timeline for the project.

🎓 Education

University of Waterloo

Waterloo, ON

CANDIDATE FOR BAsC, HONOURS, COMPUTER ENGINEERING (CO-OP)

Sep. 2015 - PRESENT

- President's Scholarship (\$2000).
- Mississauga Chapter of Professional Engineers Ontario (PEO) Scholarship (\$500).
- Expected April 2020.