

# JAMES HAGEMAN

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Software Engineering | University of Waterloo | [github.com/JamesHageman](https://github.com/JamesHageman)

## SUMMARY OF QUALIFICATIONS

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- Production/infrastructure engineering: system deployment, automation, monitoring, root-cause analysis
- Backend application development: web services, API integration, databases, migrations, test pipelines
- Frontend web development with JavaScript: React, Redux, AngularJS, test-driven development

## PROFESSIONAL EXPERIENCE

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**Apple** Maps Infrastructure Engineering Intern, Sunnyvale CA Summer 2018

- Migrated CI infrastructure to use dynamic scheduling, automating provisioning and increasing utilization
- Consolidated Jenkins and service log delivery into Splunk and blob storage, simplifying root cause analysis
- Major refactoring of monolithic Python codebase, implementing code review, bug tracking, and tests
- Worked across multiple services and CI systems using Python, Ruby, Jenkins, Chef, Splunk, PostgreSQL

**Shopify** Production Engineering Intern, Waterloo ON Fall 2017

- Implemented DNS-based failover for Elasticsearch clusters, reducing incident response time to 5 minutes
- Refactored Elasticsearch indexing to be interruptible and resilient, unblocking our product teams
- Architected a zero downtime Elasticsearch version upgrade using multiple clusters and CI pipelines
- Built a safe topic deletion mechanism for Kafka, allowing teams to iterate without risking data loss

**Shopify** Developer Intern, Waterloo ON Winter 2017

- Shipped merchant-facing error reporting for Shopify Scripts using Ruby, Kafka, Sentry, and React, increasing merchant trust and decreasing support load from broken scripts
- Streamlined customer migrations to Shopify Plus by developing the [Bulk Account Inviter](#) app
- Deployed and monitored new production services with Kubernetes, CI, and Datadog

**Rangle.io** JavaScript Developer Co-op, Toronto ON Summer 2016

- Developed multiple frontend features of [aldoshoes.com](#) using React, Redux, Redux-Saga, Ramda
- Increased SEO and time-to-interaction by rendering the React app on the server side in Node.js
- Synchronized between 5 remote teams in an agile process delivering working software every week
- Reduced bugs by maintaining 80% unit test coverage with Mocha, Enzyme and CircleCI

**Innovasium Digital** Web Developer, Markham ON Summers 2012 - 2015

- Migrated legacy CMS platform to Docker using AWS ECS for deployment and CircleCI for automation
- Facilitated multiple onboarding sessions teaching React, Redux and Ruby on Rails to new co-op students
- Built multiple web applications with technologies including PHP, Node.js, React, Angular, SQL, Adobe Flex

## EDUCATION

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**Candidate for Bachelor of Software Engineering - University of Waterloo** 2015 - 2020

- President's Scholarship of Distinction for entrance average above 95%
- Dean's Honour List and the top decile in 1A

## PROGRAMMING SKILLS

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**Languages:** Ruby, Python, JavaScript, SQL, PHP, Bash, Elm, Haskell, Golang, Java, C++, HTML, CSS

**Technologies:** Docker, Rails, React, Elasticsearch, Kafka, AWS, Kubernetes, Datadog, Splunk, Sentry, Chef, Jenkins

## INTERESTS

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- Performing music: jazz/blues guitar, vocals, piano
- Personal finance: budgeting, investing, and forecasting