

# JAMES HAGEMAN

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Software Engineering Class of 2020 | University of Waterloo | [github.com/JamesHageman](https://github.com/JamesHageman)

## SUMMARY OF QUALIFICATIONS

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- Production/infrastructure engineering: deployments, automation, observability, networking, debugging
- Backend application development: web services, API integration, databases, migrations, test pipelines
- Frontend web development: JavaScript, React, Redux, server-side rendering, test-driven development

## PROFESSIONAL EXPERIENCE

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- Jane Street** Software Engineering Intern New York, NY | Fall 2019
- Modified an in-house DSL's parser, improving error diagnostics and providing new capabilities to traders
- Stripe** Software Engineering Intern – Edge Seattle, WA | Winter 2019
- Designed and implemented a layer-7 DDoS suppression mechanism by upgrading the format of API keys
  - Surfaced customer TLS handshake latency metrics by adding telemetry to the Stripe API client libraries
- Apple** Maps Infrastructure Engineering Intern Sunnyvale, CA | Summer 2018
- Migrated CI infrastructure from static hardware assignment to dynamic process scheduling: automating node configuration, increasing utilization, and permitting runs in multiple datacenters for high availability
  - Consolidated Jenkins and service log delivery into Splunk and blob storage, simplifying root cause analysis
  - Refactored complex monolithic Python codebase, implementing code review, bug tracking, and tests
- 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
- Shopify** Backend Developer Intern Waterloo, ON | Winter 2017
- Shipped merchant-facing error reporting for Shopify Scripts using Ruby on Rails, 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
- Rangle.io** JavaScript Developer Intern Toronto, ON | Summer 2016
- Developed multiple frontend features of [aldoshoes.com](https://aldoshoes.com) using React, Redux, Redux-Saga, Ramda
  - Synchronized between 5 remote teams in an agile process delivering working software every week
- Innovasium Digital** Web Developer Markham, ON | Summers 2012 - 2015
- Migrated legacy CMS platform to Docker using AWS ECS for deployment and CircleCI for automation
  - Built multiple web applications with technologies including PHP, Node.js, React, Angular, SQL, Adobe Flex

## TECHNICAL SKILLS

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

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

## 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 in 1A and 3B

## INTERESTS

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- Music performance: jazz/blues guitar, piano, singing
- Skiing, hiking, kayaking