JAMES HAGEMAN

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Software Engineer | github.com/JamesHageman | linkedin.com/in/james-hageman

SUMMARY OF QUALIFICATIONS

An experienced infrastructure software engineer with a track record of shipping, passionate about distributed systems and networking, working on security, high-availability, observability, operability and automation.

PROFESSIONAL EXPERIENCE

Shopify Production Engineer – Search Platform   Remote, Canada | Aug 2020 - Present
- Key contributor on a team managing Elasticsearch and Kibana infrastructure-as-a-service on GKE for the entire company through automation.
- Championed, designed, migrated, and shipped multiple strategic changes to the infrastructure, improving observability, disaster recovery, cluster relocation/failover, access control, and security.
- Established the de-facto client identity approach for datastores across Production Engineering.
- Leveraged Go, Kubernetes controllers, Envoy, Nginx, HashiCorp Vault, mTLS, GCP.
- On-call, incident response, maintenance, root-cause analysis. Interviewing, intern mentoring, teammate mentoring as the domain expert on Go, networking, and TLS.

Jane Street Software Engineering Intern   New York, NY | Fall 2019
- Prototyped a zero-allocation multicast UDP transport layer for market data delivery in OCaml.
- Modified an in-house DSL's parser, improving error diagnostics and providing new capabilities to traders.

Stripe Software Engineering Intern – Edge Team   Seattle, WA | Winter 2019
- Designed and shipped 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 Python + Jenkins CI infrastructure from static hardware assignment to dynamic scheduling, automating node configuration, increasing utilization, and permitting runs across multiple datacenters.

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 pipeline to be interruptible and resilient, unblocking our product teams.

Shopify Backend Developer Intern   Waterloo, ON | Winter 2017
- Shipped merchant-facing error reporting for Shopify Scripts using Ruby on Rails, Kafka, Sentry, and React.
- Streamlined customer migrations to Shopify Plus by developing the Bulk Account Inviter app.

Rangle.io JavaScript Developer Intern   Toronto, ON | Summer 2016
- Developed multiple web frontend features of aldoshoes.com using React, Redux.
- Synchronized between 5 remote teams in an agile process delivering working software every week.

Innovasium Digital Web Developer   Markham, ON | Summers 2012 - 2015
- Various web development projects using PHP, Node.js, React, Angular, SQL, Adobe Flex + ActionScript.

TECHNICAL SKILLS

Languages: Go, Ruby, Python, OCaml, JavaScript, SQL, Bash, Java, C++, HTML, CSS, a little French
Technologies: Docker, Kubernetes, Envoy, Nginx, Elasticsearch, Kafka, Rails, React, GCP, AWS

EDUCATION

Bachelor of Software Engineering - University of Waterloo   Waterloo, ON | 2015 - 2020