Karl Parkinson

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Work Experience

Senior Site Reliability Engineer

Jobber

June 2021 - Present

Edmonton, AB

- Automation of operational tasks using Ruby and Bash. Examples include automatic rollout of new configuration variables to running services and nightly zero downtime application of operating system updates to instances in ECS clusters.
- Assist with new service rollouts by helping developer teams estimate capacity needs, build cloud infrastructure with Terraform, and write playbooks to minimize MTTR of future incidents after service rollout.
- Administration of large-scale containerized Ruby on Rails application and backing services in AWS ECS..
- Document operational tasks to enable repeatable actions and future automation.

Site Reliability Engineer

Iobber

May 2019 - June 2021

Edmonton, AB

- Migrated cloud infrastructure from Heroku to a cluster of Docker containers in AWS ECS. Work included
 writing Dockerfiles to move to a container runtime environment, building cloud infrastructure with Terraform,
 enabling blue/green deployments with CircleCI and Bash, and ensuring a zero downtime switch of production
 traffic from Heroku to AWS.
- Participant in after-hours and daytime PagerDuty rotation. Respond to platform emergencies and alerts and debug production issues across all levels of the stack.
- Teaching and documenting on-call processes to establish strong operational readiness across teams. Lead postmortems and root cause analysis to improve all aspects of system performance and reliability in order to increase MTBF and minimize MTTR.
- Set up operational dashboards using New Relic and Prometheus with alerts flowing to Slack and PagerDuty for visualizing service metrics and performance of production environments.
- Documented Terraform IAC best practices to enable education and adoption throughout the organization.

Software Developer

Jobber

June 2016 - May 2019

Edmonton, AB

- Worked on a payment system called Jobber Payments that grew to process over \$1 billion. Written in Ruby on Rails and Javascript.
- Developed an online booking feature that allows customers to book appointments with home service providers. Written in Ruby on Rails and Javascript.

Software Development Intern

Invidi Technologies Corporation

May 2014 – September 2015

Edmonton, AB

- Development of an automated testing framework designed to ensure the Invidi Advatar platform performs correctly at scale. Written in Ruby with a PostgreSQL backend. Wrote Ruby code which first simulates a daily load of SOAP calls made in a customer deployment, collates response time results, and then displays a report summarizing the performance of the system under test.
- Helped design and engineer a real-time data analysis and monitoring tool to diagnose the health of the Advatar platform. Built using Java, Apache Storm, and a SQL Server data warehouse. Primarily worked on writing SQL stored procedures in the data warehouse and developing JUnit tests to ensure correctness of code used to extract data from customer logs.

Education

University of Alberta BSc with Specialization Computing Science

September 2011 – May 2016

• GPA: 3.65