

# David Briggs

## Software Engineer

### Contact

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### Education

University of Waterloo  
B. Computer Science  
2015-2020

### Website

dpbriggs.ca

### GitHub

github.com/dpbriggs

### LinkedIn

linkedin.com/in/dpbriggs

### Skills Summary

Technologies:

- AWS
- Django
- Docker
- Flask
- GRPC
- Git
- Kubernetes
- Postgres
- Quill
- React
- Redis
- Unix & Shell tools

Proficient in:

- Rust
- Scala
- Python
- Javascript
- C/C++
- Bash
- Shell Tools
- Emacs & Vim

### Work Experience

#### SOFTWARE ENGINEER (SPLUNK PHANTOM)

September 2019 - December 2019

Assisted Python3 transition with a focus on security and automation tooling.

- Refactored a C++ Python2 interpreter spawner to support Python3.
- Identified, reported, and closed a variety of frontend and backend security issues.
- Developed a Slack-style slash-commands automation feature in a C++/Django stack.

#### SOFTWARE DEVELOPER (ZENREACH)

January 2019 - April 2019

Helped engineer and deliver Google Ads integration for the Ads product.

- Spearheaded the Google Ads and Campaign Abstraction microservices, using Scala, GRPC, Postgres, and Redis.
- Engineered a generic caching strategy to improve metrics API speed by 20X in Scala with Redis and GRPC.
- Wrote detailed design documents for Databasing, Caching, Google Ads API usage, and Audience Generation, with JIRA tickets.

#### R&D SOFTWARE ENGINEER (OPENTEXT)

May 2018 - August 2018

Researched enterprise grade container solutions (Docker & Kubernetes).

- Developed a service discovery abstraction service in Python/Bash, used to increase flexibility of offerings and lower maintenance costs.
- Researched virtual machine snapshot style containerization with Kubernetes.

#### SOFTWARE ENGINEER (TRANQUANT)

September 2017 - December 2017

Designed and developed systems for software and container deployment.

- Developed a graph-based container framework with a React frontend.
- Significant Dev-Ops work with AWS; ECS, EC2, and more.

#### APPLICATION DEVELOPER (DOCTORCARE)

January 2017 - April 2017

Designed and Developed a medical digest report pipeline and website.

- Created a report-making pipeline to automatically collect, parse, and store medical finance information.
- Developed a Django website to create PDF finance reports, using Print CSS, Postgres, Redis, Weasyprint, Django templating & ORM.

#### FULL STACK DEVELOPER (POLAR)

May 2016 - August 2016

Developed stack-wide sellable features and supervised other co-ops.

- Researched, delegated, and developed features in a Django/React stack.
- Improved product responsiveness by 50% on average.

### Projects / Contracting

#### REDIS-OXIDE

2019 - Present

Protocol-compatible, multi-threaded implementation of Redis in safe Rust. Written with Rust, Tokio, and Serde. <https://github.com/dpbriggs/redis-oxide>

#### R&D SOFTWARE ENGINEER CONTRACTOR (OPENTEXT)

September 2018 - December 2018

Technically reviewed issues and projects to speed up development. Developed Kubernetes solutions further. Assisted new members with git, code review tools, linux knowledge, and products.

#### SYSTEMS CONTRACTOR (DOCTORCARE)

May 2017 - August 2017

Technically reviewed major projects and issues, saving up to 50% on development time. Assisted with co-op hiring process to ensure good technical fit.

**Interests:** Mathematics, linux, emacs, cryptography, working out, cooking.