

# David Briggs

University of Waterloo Undergraduate

## Contact

+1 (647) 628 9432  
david@dpbriggs.ca

## School

4A Computer Science  
Student ID: 20616231

## 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

### Winter 2019 **SOFTWARE DEVELOPER (ZENREACH)**

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.

### Spring 2018 **R&D SOFTWARE ENGINEER (OPENTEXT)**

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 and deployment with Kubernetes.

### Fall 2017 **SOFTWARE ENGINEER (TRANQUANT)**

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.

### Winter 2017 **APPLICATION DEVELOPER (DOCTORCARE)**

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.

### Spring 2016 **FULL STACK DEVELOPER (POLAR)**

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

### Winter 2019 **REDIS-OXIDE**

Protocol-compatible, multi-threaded implementation of Redis in safe Rust. Written with Rust, Tokio, Serde, and Combine. <https://git.io/fj4qa>

### Fall 2018 **R&D SOFTWARE ENGINEER CONTRACTOR (OPENTEXT)**

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.

### Spring 2017 **SYSTEMS CONTRACTOR (DOCTORCARE)**

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

## Education

2015–2020 **Candidate for Bachelor of Computer Science**  
4A Student, 77% CAV

University of Waterloo

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