

Technical Qualifications

- **Languages:** Javascript, Scala, Python, Java, C++, C#, Bash, SQL, R, Visual Basic
- **Technologies:** React, AngularJS, Play Framework, Flask, Node.js, Hadoop, Amazon Web Services
- **Tools:** Git, SVN, Vim, Eclipse, Visual Studio, SQL Server, Android Studio, IntelliJ IDEA, IDLE

Work Experience

[Google](#) – Kitchener, Ontario

August 2015 – Current

Software Engineering Intern – Display Ads Infrastructure

- Maintained the Supermixer, a central routing and management service that connects all ad services (e.g. AdWords, DoubleClick) together, making it one of the highest traffic services that Google maintains.
- Improved the Supermixer release process; designed a binary to detect configuration changes between redeployments, and simplified 10+ release workflows.
- Migrated the routing code path from a state machine-based execution workflow to a dependency graph-based workflow, improving its multi-threading ability.

[Coursera](#) – Mountain View, California

January 2015 – May 2015

Data Infrastructure Engineer

- Built the frontend for Coursera's A/B testing platform in React, including experiment management tools and an analytics dashboard; scaling it up from 20 to 250 A/B experiments in 3 months.
- Developed and maintained back-end services; such as adding by-URL allocated A/B experiments and modifying Coursera's second-most popular API endpoint.
- Co-authored [Dataduct](#), Coursera's open-source ETL library for Amazon Data Pipeline and Redshift, which manages all of Coursera's 110+ ETLs and 360+ tables for its data warehouse.
- Extended Coursera's accounting system to support its new "on-demand" platform.

[Desire2Learn](#) – Kitchener, Ontario

April 2014 – August 2014

Software Developer

- Implemented, and maintained new and existing features for the learning management system Brightspace.
- Collaborated with teammates to resolve over 40 performance, usability, and security issues.
- Extended RESTful APIs and native applications to help a client manage 30000+ metadata entries.

Projects

2048 Android App (ls.tpcstld.me/LZ5VTvpNy)

- A port of the 2048 puzzle game to Android
- Earned 100 000+ downloads, 4.4 stars with 2000 reviews on Google Play

Youtube Downloader (youtube.tpcstld.me)

- A website that downloads YouTube videos in mp3 or mp4 format
- Tools: Python, FFmpeg, Foundation, Heroku

Audition Image Recognition

- An image recognition program to detect upcoming commands for the rhythm game Audition
- Tools: C++, OpenCV, Windows API

Activities and Clubs

Computer Science Club

Sept 2009 – June 2013

President

- Taught members algorithms (e.g. BFS) and data structures (e.g. queues)
- Participated in the CCC, ECCO, DWITE and CASCAN programming contests

Education

Candidate for Software Engineering

Sept 2013 – Present

University of Waterloo, Waterloo, Ontario

- Achieved a 94.25% cumulative average