

Saksham Sachdev

3B UWaterloo Software Engineering
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Languages & Tools

Languages Java, Python, JavaScript, Go, SQL, C#, C/C++
Tools & Frameworks PostgreSQL, Node.js, Hadoop, AWS, Ansible, Bash, Vim, Vagrant, Protobuf, Git

Work Experience

Site Reliability Engineering Intern at **Google** Cambridge, MA, May-Aug. 2017
Systems Modelling and Actuation Team

Go, Protocol Buffers, Python, various internal configuration languages

- Implemented features in a growing deployment configuration framework affecting **~500,000 build targets across ~3500 Google services**
- Designed a **rollout infrastructure** to safely push new changes to a core build pipeline
- Refactored a generalized and concise solution to a custom **protocol buffer merging algorithm**
- Coordinated with other teams and users independently to support individual use cases while ensuring backwards compatibility

Software Developer at **Hubdoc** Toronto, Canada, Aug-Dec. 2016

Node.js, Elasticsearch, Hadoop, AWS, FluentD, Vagrant, Ansible, PhantomJS

- Designed and implemented a **highly available logging infrastructure** and consolidated user interaction data to improve UX
- **Automated deployment** for an Elasticsearch cluster and MongoDB replica set using Ansible
- Prototyped a **data pipeline** using Hadoop (HDFS) to efficiently archive old log data
- Maintained 100+ web scraping microservices in a small team for 7000+ monthly users

Software Engineering Intern at **Toast Inc.** Boston, MA, Jan-Apr 2016

Java, Play Framework, PostgreSQL, JavaScript (AngularJS)

- Built a public geolocation API and **optimized underlying SQL queries** decreasing endpoint response time by over 50%
- Upgraded 30+ restaurants to a new online ordering engine iteratively in an **agile environment**. A sample customer site: <https://www.toasttab.com/paris-creperie/v2/online-order>

Web Application Developer at **Radialpoint** Montreal, Canada, May-Aug 2015

Django Web Framework, JavaScript, jQuery, Bash

- Implemented a user **authentication and authorization API** in Python for **single sign-on** resulting in a more consistent user experience

Projects

Axis

Node.js, Express, paper.js, HTML, CSS

- Created a stick figure animator that can automatically interpolate between keyframes, **winning first place** at EngHack Waterloo
- Devised the mathematical model for the core underlying linear interpolation algorithm

Felice

d3.js, Spotify API, Echonest API, MongoDB, Backbone.js, Node.js, Express

- Developed several genre **data visualizations** for clients' music libraries resulting in **500+ users** to date by writing data manipulation algorithms

Education

University of Waterloo Bachelor of **Software Engineering 2014-19**, Class Academic Rep since 2014
Courses OS, OOP, Compilers, Algorithms, Graph Theory, Combinatorics