

3B Software Engineering

a sahiljain.ca

4 647-949-8165

☑ s44jain@uwaterloo.ca

SKILLS

Languages: Java, C/C++, Scala, JavaScript, Python, HTML/CSS, PHP, Ruby, SQL

Technologies: Android, Node.js, Cassandra, MySQL, MongoDB, React/Angular JS, Rails

Software: IntelliJ IDEA, Git, SVN, Mercurial, Vim, Tmux, Jenkins, AWS

EXPERIENCE

FACEBOOK SOFTWARE ENGINEERING INTERN

Spring 2016 | Menlo Park

C++, Java, PHP, Flatbuffers, Thrift, Zstandard Compression

- Contributed to cross-platform data-syncing library in Messenger
- Reduced Messenger background data usage by **1-2%** overall using Invertible Bloom Filters for set reconciliation
- Optimized state logic to reduce round-trip requests
- Recommended Zstandard dictionary compression using benchmarks
- Recommended changes to Flatbuffer schemas to reduce serialized message size
- Independently contributed to Google Flatbuffers **open source** project

PAGERDUTY BACKEND SERVICES DEVELOPER

Fall 2015 | Toronto

Scala, Cassandra, Rails, Python, MySQL, Finagle, Thrift, AWS

- Improved reliability, scalability, and performance of critical realtime **Scala services** in the alerting pipeline
- Increased data archival speed **10x** by implementing concurrency
- Optimized Cassandra queries, improved SLA metric accuracy and reduced transient alerts

REMIND101 SOFTWARE ENGINEERING INTERN

Winter 2015 | San Francisco

Android, Robolectric, SQL, Jenkins, AngularJS, Rails

- Developed Android client with over 5 million downloads
- Independently developed Office Hours feature, used by over 50% of teachers
- Implemented Material Design and enhanced notifications for Android Wear
- Improved test suite performance by migrating to Robolectric, reconfiguring Jenkins
- Made UI improvements to Rails and Angular app

PIVOTAL LABS AGILE ENGINEERING INTERN

Spring 2014 | Toronto

- Android, Robolectric, SQL
 - Prototyped and released Android apps using **TDD** and **Agile**
 - Learned Android testing best practices from the creators of Robolectric

PROJECTS

CHESS Al Java, Javascript, Amazon EC2

• A computer player using the minimax algorithm with alpha-beta pruning

WHITEBOARD Node.js, ExpressJS, MongoDB, EJS Templating

- A platform to help find developers for side projects
- Winner of the **Best Design Award** at HackWaterloo

EDUCATION

UNIVERSITY OF WATERLOO BACHELOR OF SOFTWARE ENGINEERING

Expected April 2018 | Cumulative average: 92.6%

AWARDS

University: Dean's Honour List, top 10% of class every term, President's Scholarship **High School**: 1st in school in Fermat/Euclid/CCC/SIN, Governor General's Award