

3B Software Engineering

**a** sahiljain.ca

**6**47-666-6666

SKILLS

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

Technologies: Android, Node.js, Cassandra, MySQL, MongoDB, React/AngularJS, 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 Android, Robolectric, SQL, Jenkins, AngularJS, Rails Winter 2015 | San Francisco

- 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 Android, Robolectric, SQL

Spring 2014 | Toronto

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

PRO JECTS

CHESS AI 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

**FDUCATION** 

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