Sahil **Jain**

4B Software Engineering   👤 sahiljain.ca   📞 647-949-8165   ✉ s44jain@edu.uwaterloo.ca

SKILLS

Android: SQLite, Robolectric, Espresso, JUnit, Mockito, Litho

Frontend: React, Angular, HTML/CSS, JavaScript, Ruby/Rails, PHP

Backend: Java, C++, Scala, Python, SQL, Node.js, MongoDB, Cassandra, Thrift, Flatbuffers

Software: IntelliJ IDEA, Git, SVN, Mercurial, Vim, Tmux, MySQL, Jenkins, AWS EC2

EXPERIENCE

FACEBOOK Software Engineering Intern
Fall 2017 | New York City

- Live Videos team, enhanced the viewing experience for the **Android** client, used by **millions daily**
- Improved video discoverability by showing suggested Live videos, using the Litho framework
- Improved fullscreen watch time by **0.5%** by implementing a fullscreen button
- Developed feature to tag and invite friends in comments
- Decreased client data usage by **0.6%** by allowing users to mute comments via a button
- Redesigned comment composer as part of app-wide redesign

GOOGLE Software Engineering Intern
Winter 2017 | Waterloo

http://github.com/google/walt

- Developed features for WALT, an open source **Android** app + hardware which measures latency of physical sensors for Android/ChromeOS devices
- Implemented live graphs to show measurements in real-time, and provide greater insight into trends
- Exposed the root cause of device latency by adding events to **Android Systrace**
- Created accelerometer latency measurement in **Arduino C++** for VR devices
- Introduced automated testing by starting a JUnit test suite, with Mockito
- Automated uploading of measurement data by developing a **Python** server

FACEBOOK Software Engineering Intern
Spring 2016 | Menlo Park

- Developed features for C++ 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
- Presented recommendations for **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

- Improved reliability, scalability, and performance of critical real-time **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

- Developed for Android client with over **10 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**, and reconfiguring Jenkins
- Made UI improvements to Rails and **Angular** app

PIVOTAL LABS Agile Engineering Intern   Spring 2014 | Toronto

- Prototyped and released Android apps using **TDD** and **Agile**
- Shipped mobile payment app and XMPP chat app
- Learned Android testing best practices from the creators of Robolectric

PROJECTS

CHESS AI
Java, JavaScript, AWS EC2

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

WHITEBOARD
Node.js, ExpressJS, MongoDB

- A platform to connect developers
- **Best Design Award** at HackWATERLOO

DIGIT RECOGNIZER
MATLAB, JavaScript

- Used MNIST dataset to train a **neural network** via backpropagation

EDUCATION

UNIVERSITY OF WATERLOO
Bachelor of Software Engineering

Expected April 2018 | Cumulative average: **91.8%**

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

MENTORSHIP

Fraser Hacks: Speaker, judge, and led an Android workshop