

# Hanson Ng

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## Skills

**Languages and Frameworks** Java (Play, Spring), Ruby (Rails), HTML/CS/JS (React, Express, RxJS), Golang, C++, C, Python  
**Technologies** Relational Databases, Redis, Hadoop, Spark, Android, Docker

## Experience

### Citadel LLC

New York, NY

SOFTWARE ENGINEERING INTERN (FULL STACK)

May - Aug. 2019

- Developed and released a real-time financial data web-application in React and RxJS utilized by hundreds of analysts
- Maintained and added data processing and visualization functionality to Java and Hapi.JS backend APIs

### Scribd

San Francisco, CA

SOFTWARE ENGINEERING INTERN (DATA ENGINEERING)

Sep. - Dec. 2018

- Monitored and managed the data pipeline; maintained Hadoop jobs and handled content ingestion and parsing issues
- Rewrote and optimized two largest daily Hive tasks in Spark, reducing runtime by 92%
- Rearchitected task scheduling service and backend logging; improvements enabled recovery runs and task history queries
- Released a new Go based image delivery and processing server and implemented an algorithm to dynamically generate matching backgrounds for book covers

### StackAdapt

Toronto, ON

SOFTWARE ENGINEERING INTERN (FULL STACK)

Jan. - Apr. 2018

- Optimized the main dashboard by creating a custom SQL statement assembler and reduced page loading times by 91%
- Developed features in Rails such as supporting multiple user sessions, an internal beta mode, new statistics reporting, and created React components for front-end rework
- Integrated a geolocation mapping API and OS version filtering to a performant Go ad-exchange bidding service
- Prototyped a service to capture live browser screenshots to provide insight into client advertisement displays

### Street Contxt

Toronto, ON

SOFTWARE ENGINEERING INTERN (FULL STACK)

May - Aug. 2017

- Shipped features in Play such as content bookmarking, integrating a client CSM database, new internal metric reports, and React updates for a platform overhaul
- Built an Akka microservice to track interaction times via tracking pixels, utilizing Datagod for metrics monitoring
- Expanded client notifications functionality by building and optimizing customized statistics reports

### CIBC Live Labs

Toronto, ON

INNOVATION ENGINEER INTERN (FULL STACK)

Sep. - Dec. 2016

- Developed an Android banking portfolio overview app and built a RESTful API for a backend service using Spring
- Prototyped an Android app using Firevase, OCR, and Socket.IO to perform bill splitting sessions and background payments

### Shoppers Drug Mart Innovation

Toronto, ON

APPLICATIONS DEVELOPER INTERN (ANDROID)

Jan. - Apr. 2016

- Finished and released an Android pharmacy ailment diagnosis tool; estimated at \$10 million in outsourced development
- Implemented a head office check-in system using an Android app and a Google RESTful Apps Script Execution API

## Education

### University of Waterloo

Waterloo, ON

BACHELOR OF APPLIED SCIENCE IN MECHATRONICS ENGINEERING, HONOURS CO-OP

Apr. 2020

- Cumulative Average of 88%
- Prototyped an IoT Smart Parking Device using LoRa Technology and built a React based Visualization and Analytics Platform for Final Design Project; received the Voestalpine Award for Design Elegance