# Avik Hasija

#### University of Waterloo

Systems Design Engineering



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AvikHasija

## Skills

#### Languages

- Java
- C++
- Python
- JavaScript
- · HTML/CSS
- XML

# Tools, Frameworks, and Libraries

- · Android SDK
- Crashlytics
- Volley
- Retrofit
- · Butter Knife
- Node.js
- MongoDB
- SQLite

## **Awards**

- 2nd Place Ontario
   Engineering Programming
   Competition, 2017
- 1st Place Waterloo Engineering Programming Competition, 2016

# Experience

## **Native App Developer** CBC/Radio-Canada

Jan '17 - Apr '17

- Developed new features, interfaces, and bug fixes for major redesign of CBC News Android app in Java and XML, causing an increase in MAUs of 16% to over 500k+
- Implemented client-side functionality for search, trending articles, and localized news using internal CBC APIs
- Overhauled app navigation interface using Bottom Navigation components
- Worked with early developer preview of Android Instant Apps to create CBC News instant app split, which was unveiled at Google I/O 2017
- Used Media Sessions and Browser Services to develop a CBC News Android Auto MVP which streams CBC Radio programs

## **Lead Android Developer** *Mindbend Studio*

June '15 - June '16

- Worked on front-end design, user flow, and planning algorithmic operation of infor[me], an app to improve announcement systems in large organizations; released in closed beta to 200+ users
- Built Android app in Java and XML with scalable organizational hierarchy and administrative post approval system
- · Wrote backend functionality in JavaScript to subscribe users to organizations

# **Projects**

#### **Political News Bot**

- Built Facebook Messenger chatbot in Node.js and MongoDB which performs sentiment analysis on articles using the Indico API to determine the news source's political stance
- User feedback is used to determine political affiliation; this model is continually adapted so users are served news aligned with their beliefs

## **Learning Lock**

- Uses Android services and AWS Machine Learning to create a lock screen which can differentiate between owner and intruder
- Selected as DevPost weekly staff pick in February 2016
- Integrated lock pattern, pulled data from pattern nodes to train a neural network

#### **PWR**

- Power grid management simulator which visualizes path between power plants and homes, built with JavaScript and Electron
- Meets specifications by computing distance and financial metrics on an hourly basis
- Implemented Djikstra's pathfinding algorithm to reduce path inefficiencies

### ITGS Prep

- Built card-based Android app following Material Design guidelines to help students study ITGS course content
- 500+ downloads on the Google Play store with an average 4.8 rating