# **ARPIT PATEL**

#### a285pate@uwaterloo.ca • github.com/Arpit-Patel • arpit-patel.xyz • /in/inarpitpatel

## **Skills**

Languages: JavaScript, Python, Scala, C, C++, Bash, Swift, Objective-C, Java

Frameworks/Libraries: Node.js, Flask, React Native, Native iOS, Native Android

Other: AWS, Google Cloud, Azure, Heroku, Kubernetes, Docker, Git, Linux/Unix, Elasticsearch, Dialogflow

# **Experience**

### LCBO|next • Backend & iOS Developer • Waterloo, ON

September 2018 - December 2018

- Improved product matching accuracy by 68% using Elasticsearch's prefix matching configuration
- Determined relevant parameters for the Elasticsearch configuration by implementing a scoring algorithm in Python
- Enabled voice search by building a Node.js RESTful service that utilizes Dialogflow
- Developed a cocktail mixing iOS app to guide usage of LCBO products

#### Taplytics • SDK Engineer • Toronto, ON

January 2018 - April 2018

- Reduced vital view load times by 50% for a client's app by improving the iOS SDK's view swizzling lifecycle
- Shipped and implemented entire mobile side of launch control, which achieved 3<sup>rd</sup> place on daily <u>product hunt</u>
- Resolved integration issues by modifying small code to inject the Android SDK and replicate issues using Apktool
- Fixed long-standing React Native SDK issues by implementing various native bridge methods
- Minimized erroneous SDK behavior by writing unit tests for all changes made using XCTest and Mockito

#### 3conX • iOS Developer • Waterloo, ON

May 2017 - August 2017

- Ported MavLink enabled drones by building an iOS SDK using the MavLink Protocol
- Increased drone communication range by 3 km by developing an asynchronous receiver-transmitter bridge
- Mitigated potential battery damage by implementing a 'safe' flight capacity feature using physics knowledge

#### L'Focus Consultancy Inc. • iOS Developer • San Jose, CA

May 2016 - August 2016

- Developed iOS port for Pharmaceutical app, SnapRx (10,000+ downloads)
- Reduced login and registration time exponentially by designing and implementing an auto fill system

# **Projects**

# Vidzam • Identifies music in a segment of a video

April 2018 - Present

- Managed music identification by developing and deploying identification and authentication microservices
- Improved scalability by containerizing and orchestrating automated deployments using Kubernetes and Docker
- Added security measures by sanitizing input, utilizing authentication tokens, rate limiting, and queuing requests

Tech Stack: AWS EC2, Google Kubernetes Engine, Docker, Node.js, Xcode, Swift, FFmpeg, ACRCloud

**Image Zone** • Classifies and scrapes images • imagezone.herokuapp.com

August 2017 - September 2017

- Built an application that tags objects within an image and scrapes images from Google to train classifiers

Tech Stack: Flask, Python, Bootstrap, JavaScript, Heroku, TensorFlow, BeautifulSoup

## **Education**

University of Waterloo: Computer Science with Combinatorics and Optimization Minor

2015 - 2020

- Object-Oriented Programming, Algorithms, Operating Systems, Distributed Systems, Networks, Security