ARPIT PATEL

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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 search 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 3rd place on daily product hunt
- Resolved integration issues by modifying smali 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