ARPIT PATEL

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Education

University of Waterloo: Computer Science with Combinatorics and Optimization Minor 2015 - 2020

- **Relevant Coursework**: Object-Oriented Programming, Data Structures, Algorithms I & II, Operating Systems

Experience

3conX • Toronto, ON May 2017 - August 2017

iOS Developer

- Developed and tested an iOS app that performs drone surveillance using Swift, Objective-C, CocoaPods, and C++
- Built an iOS SDK that ports MavLink enabled drones using C++ and the MavLink Protocol
- Coordinated packet exchange between device and drone by developing an asynchronous receiver-transmitter bridge
- Mitigated potential battery damage by implementing a 'safe' flight capacity feature using physics knowledge

Hack The 6ix • Toronto, ON August 2017

Backend Developer

- Responsible for handling requests made to PinIt a Tweet sharing web app using Python, Flask, and JavaScript
- Made PinIt responsive by implementing an AJAX script to query from the Twitter Search API every 7 seconds

L'Focus Consultancy Inc. • San Jose, CA May 2016 - August 2016

iOS Developer

- Led development of iOS port for Pharmaceutical app, SnapRx (10,000+ downloads) using Swift and Objective-C
- Reverse engineered SnapRx's android app to improve and replicate UI flow with CocoaTouch and CocoaPods
- Reduced login and registration time by designing and implementing auto fill features

Skills

Languages/Frameworks: Swift, Objective-C, Python, Flask, Bootstrap, MEAN Stack, SQLite, Scala, C, C++, Bash

Technologies: iOS, Git, JIRA, Bitbucket, Unix/Linux, Vagrant, Heroku, AWS, MavLink Protocol, TensorFlow

Projects

Image Zone • imagezone.herokuapp.com

- Built a Flask app that identifies objects within an image using TensorFlow, Bootstrap, JavaScript, HTML, and CSS
- Launched an image scraper for training classifiers by scraping images from Google using Python and BeautifulSoup

Caesar Cipher Web Application

- Built a Flask app that encrypts and decrypts any given message using different encryption schemes written in Python
- Launched a Linux web server for local web app hosting using Apache, Flask, and Vagrant

Student Colonization Game

- Developed an altered version of the popular Settlers of Catan game using C++
- Ensured clean and efficient code using abstract data structures, design patterns, and object-oriented programming

Sound Amplifier

- Built a sound amplification system using Python and many hardware components

Create Meetups Web Application

- Built a responsive single-page web app that requests and stores meet up data using the MEAN stack