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
- **President's Scholarship of Distinction**: Achieved an admission average higher than 95%

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 the infrastructure for an iOS SDK that will port MavLink enabled drones using C++ and the MavLink Protocol
- Handled MavLink packet exchange between iOS device and drone by developing and configuring a UART bridge
- Mitigated potential battery damage by implementing a 'safe' flight capacity feature using physics knowledge
- Resolved major flight functionality issues by implementing loopholes found through black-box testing of the DJI SDK

L'Focus Consultancy Inc. • San Jose, CA   June 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

Hack The 6ix • Toronto, ON   August 2017 - 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

University of McMaster • Toronto, ON   August 2013 - August 2013
LEAP Computer Engineering Participant
- Built a sound amplification system using intermediate circuit and program design

Skills

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

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,
- Launched an image scraper for training classifiers by scraping images from Google using BeautifulSoup
- Assembled frontend using Bootstrap, JavaScript, HTML, and CSS

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

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