ARPIT PATEL

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Education

University of Waterloo: Bachelors in Computer Science with Combinatorics and Optimization Minor 2015 - Present

- **Presidents Scholarship of Distinction:** Achieved an admission average higher than 95%
- **Relevant Coursework:** Object-Oriented Programming, Data Structures, Algorithms I & II, Operating Systems

Experience

3conX - Waterloo, ON May 2017 - August 2017
iOS Developer

- Focused on development and testing of an iOS app that performs automatic custom surveillance using drones
- 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 Xcode
- 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 autofill features

University of McMaster - Hamilton, ON August 2013 - August 2013
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

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

Projects

Image Zone

- Built a Flask app that identifies objects within an image using a pre-trained model and TensorFlow
- Implemented an image scraper for training classifiers by querying and scraping hundreds of images from Google
- Assembled frontend using Bootstrap, JavaScript, HTML, and CSS

PinIt - Hack The 6ix

- Pins most recent tweets by a user defined hashtag using Twitter's Search API
- Made PinIt responsive by implementing an AJAX script to query from the API every 7 seconds

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
- Ensured clean and efficient C++ 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 meetup data using the MEAN stack