

Arpit Patel

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SKILLS

LANGUAGES

JavaScript • Python • Scala • C • C++
Bash • Swift • Objective-C Java

FRAMEWORKS/LIBRARIES

Node.js • Flask • AngularJS
React Native • Native iOS
Native Android

OTHER

AWS • Google Cloud • Azure
Heroku • Kubernetes • Docker
Git • Linux/Unix • Elasticsearch
Dialogflow

EDUCATION

UNIVERSITY OF WATERLOO BS IN COMPUTER SCIENCE

September 2015 - May 2020

Relevant Coursework:

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

EXPERIENCE

AMAZON.COM | SOFTWARE ENGINEER

May 2019 - Present | Vancouver, BC

- Enforced a throttling policy to handle a forecasted 10x increase in TPS
- Implemented an intelligent error retry mechanism that retries on system healthy notifications using AWS AppSync

LCBO | SOFTWARE ENGINEER

September 2018 - December 2018 | Waterloo, ON

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

TAPLYTICS | SDK ENGINEER

January 2018 - April 2018 | Toronto, ON

- 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

May 2017 - August 2017 | Waterloo, ON

- Ported MavLink enabled drones by building an 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

May 2016 - August 2016 | San Jose, CA

- 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

- 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