Neelaksh Bhatia

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Skills

Languages: Python · C++ · Swift · SQL · Bash · Javascript
Tools: GRPC · Protobuf · OAuth · AWS · Redis · Express · RIB / VIPER · ReactiveX

Experience

Splunk
San Jose, CA
Software Engineering Intern
May 2019 - Aug 2019

- Designed and implemented a (patent-pending) low-light QR code detection framework that is used by 700k+ monthly active users using a **custom CNN** and **ARKit**, improving detection accuracy from 40% to **over 95%**
- Added the ability to view videos, images and PDFs in augmented reality while reducing CPU/GPU usage from 100% to **below 80%** in the Splunk AR app
- Prototyped real-time image segmentation, object detection and edge highlighting techniques on mobile devices to create customer POC demos
- Maintained internal iOS networking SDK by responding to developer and customer feedback using **Swift**

Secret Mission Software
Toronto, ON
Software Engineering Intern
Sept 2018 - Dec 2018

- Built a P2P chat system for an upcoming social media app (**500k+ installs**) using the extensible messaging and presence protocol
- Created a **distributed backend microservice** for chat by utilizing GRPC and Protobufs, which reduced the size of the network request payload by **more than 10%**
- Integrated the ReactiveX and IGListKit frameworks to create a highly performant and light-weight frontend experience by **minimizing UI redraws** and using a **just-in-time data fetching paradigm**
- Worked with the strongly opinionated RIB / VIPER architecture to manage the app hierarchy

TD Bank Accelerator Lab
Waterloo, ON
Mobile Developer Intern
Jan 2018 - Apr 2018

- Developed 2 consumer-facing mobile apps using Swift, Java and React Native
- Responsible for conducting consumer research, brainstorming potential improvements, and weekly iterations based on internal and external user testing

Wattpad Inc
Toronto, ON
Web Development / Mobile Test Automation Intern
May 2017 - Aug 2017

- Improved the detection speed of a spam detector tool by **5x** using a **probabilistic search paradigm**
- Developed an internal dev-ops system in ReactJS and Python to automate the delegation of JIRA tickets/stories
- Automated **200+ iOS end-to-end UI tests** using Xcode's testing framework, resulting in a peak of **99.2% crash free sessions**

Projects

Jarvis · *Python · Express · C*

- A smart-assistant / extensible platform that acts as a bridge between the command line and all of your IoT devices
- You can interface with Jarvis via an **intent-action system** using **natural language** right in the terminal

Dot · *Swift · SnapKit*

- A bullet journalling app that leverages the Apple Pencil hardware for the iPad
- Uses a proprietary vector drawing algorithm that allows for an **unlimited number of strokes** without experiencing any slowdown

Notey · *React · Firebase*

- An all-in-one Markdown/LaTeX note-taking platform designed for university students
- Uses a modified Markdown parser that doesn't block for long periods of time as to offer **real-time, inplace formatting**

Education

University of Waterloo
Waterloo, ON
B.CS Computer Science
Sep 2016 - April 2021