NEELAKSH BHATIA

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SKILLS

Languages: Python · TypeScript · Javascript · C · C++ · Java · SQL · Swift · Bash

Tools: NodeJS · MySQL · Flask · Express · qRPC · Postgres · Redis · Git · AWS · ReactiveX

EXPERIENCE

Lifion by ADP

New York, NY

Software Engineering Intern (Backend)

Jan 2020 - April 2020

- Worked on optimizing Lifion-SQL (an abstraction of SQL), which is used as the foundation for ADP / Lifion's HCM applications
- Reworked LSQL data pipelines to add support for large query results (5M+ rows) by adding
 data-streaming capabilities, resulting in a 10% reduction of query latency and 2x the number of possible
 concurrent DB connections
- Implemented query token caching in the LSQL AST tree, resulting in **95%** faster lookups and support for efficient live previews

Splunk

San Jose, CA

Software Engineering Intern (Mobile)

May 2019 - Aug 2019

- Designed and implemented a (patent-pending) low-light QR code parsing framework that is used by 700k+ monthly active users using a custom CNN and ARKit, improving detection accuracy from 40.3% to 97.7%
- Added the ability to view videos, images and PDFs in augmented reality while reducing CPU/GPU usage from 100% to 78% (under average load) in the Splunk AR app
- Maintained the internal iOS networking SDK (Spacebridge) by responding to developer and customer feedback using Swift, enabling customers to use Splunk AR features on prem

Secret Mission Software

Toronto, ON

Software Engineering Intern (Fullstack)

Sept 2018 - Dec 2018

- Built a P2P chat system for a cosmetic social media app (500k+ installs) using the extensible messaging and presence protocol (XMPP)
- Created a distributed backend microservice for chat by utilizing gRPC and Protobufs, which reduced the size of the network request payload by 81%
- 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**

TD Bank Accelerator Lab

Waterloo, ON

Mobile Development Intern

Jan 2018 - Apr 2018

- Developed an augmented reality mode for walking navigation in the TD Bank app to help point the way toward ATMs and bank locations, using Swift, Flask and ARKit
- Conducted consumer research, brainstormed potential improvements, and iterated weekly based on internal and external user testing

Wattpad Toronto, ON

Software Engineering Intern (QA + Web)

May 2017 - Aug 2017

- Applied a probabilistic search algorithm on a spam detector tool, improving the detection speed by 5x
- Developed an internal dev-ops system in ReactJS and Python to automate the delegation of JIRA tickets/stories

PROJECTS

Jarvis - NLP IoT Assistant

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 from the terminal

Notey - Low Latency Markdown Parser

Python · 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