

LEON SO

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TECHNICAL SKILLS

- **Programming Languages:** Java, C++, C, Python, Golang, JavaScript, SQL, HTML, CSS
- **Frameworks:** Node.js, Express, React, React Native, Redux, Expo, Unity, LoopBack4, Dojo
- **Databases:** MySQL, MongoDB, IBM Db2
- **Testing:** Junit, pytest, Mocha, Chai, Selenium, Mockito

WORK EXPERIENCE

Amazon | Software Development Engineer Intern May 2021 – August 2021

- Worked on Datapath, a tier-1 foundational serverless data-aware platform for low latency, high throughput, federated logical microservices that are core to Amazon's eCommerce business
- Led the design, implementation, and testing of a local and distributed caching system with negative caching, for caching AWS Security Token Service (STS) temporary credentials used for accessing customer DynamoDB tables
- Designed and developed an automatic proactive refreshing mechanism in Java, for evicting expiring entries and priming the local and distributed caches
- Improved the availability of Datapath services and mitigated the risk of quota-based throttling from AWS STS through reducing the total number of outgoing requests by approximately 70%

IBM | Full Stack Developer Intern May 2020 – April 2021

- Worked on runtime application engine and design time authoring environments for IBM Cloud Pak for Digital Business Automation under an Agile software development environment
- Implemented REST APIs to support communication between automation services and application engine
- Developed Node.js modules to incorporate security policies and user authorization
- Embedded LoopBack into automation service engine to provide dynamic routes and generate OpenAPI specifications
- Built front-end UI components using React and Java for various menus, pages, and authoring environments
- Maintained test suites, created page objects, and wrote Selenium automation tests for authoring environments
- Performed accessibility testing and development to make IBM Business Automation Studio WCAG 2.1 compliant

Passionfruit Inc. | Software Engineer Intern May 2019 – August 2019

- Designed and developed features for a social mobile application which connects people through shared interests
- Worked on creating a new user-friendly front-end and implemented many new features using React Native
- Worked on migration of back-end infrastructure and DBMS from PHP to Node.js and MongoDB
- Used Redux to manage the application state and Redux-Saga middleware to handle asynchronous actions
- Implemented schema for user and message documents in MongoDB along with schema-validation

EDUCATION

Bachelor of Engineering – McMaster University Expected graduation April 2023

- **Software Engineering & Management (co-op) – 3.9 CGPA on 4.0 scale**
Achievements: Golden Key Honour Society Recipient – Top 15% Student in Engineering Level I and III, McMaster Honour Award, Dean's Honour List

PROJECTS

MediSign

- Developed an accessible, voice-enabled electronic medical record system which stores patients' medical records, allows patients to fill out medical forms using speech-to-text and provide an electronic voice signature
- Developed front-end using React Native, created patient database using MongoDB, and setup Twilio API

InsureHome

- Designed a mobile application that helps users manage their insured assets, submit insurance claims, and get an instant estimate for their claim
- Developed front-end using React Native and Redux which leverages Expo's camera component to take and store pictures of assets before and after damage
- Trained the ML model with images of different houses using Azure's Custom Vision API