Lichen Ma

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Skills

Web Development / Spring, AngularJS, NodeJS, JS (ES6), React, SQL, HTML5, CSS3

Programming / Java, JavaScript, C++, Python, C, Matlab, Git

Data Science / Analysis using NumPy, Pandas, Statistical methods

Mobile Development / Android Game Development using Android Studio

Product Management / Strategic Planning, SDLC, UI/UX design, Agile/Scrum

Experience

Incoming Back-End Developer, _Intersect_.   Sept - Dec 2019

Full-Stack Developer, _HubHead_.   Jan - Apr 2019
- Developed the fullstack implementation of a duplicate workflow detection service for a cloud based multi-user application using **Spring**, **AngularJS**, and **PostgreSQL**
- Added client-side and server-side data validations for an Asset Management web service using **MVEL** and **SQL**, complying with enterprise-level data standards
- Optimized user accounts workflow data structure to display crucial client data and populate internal **Bonita BPM** application for user account administration, adopted throughout the organization
- Designed a SQL optimization job using Obsidian Job Scheduler, periodically removing unused database entries and **reducing process list load times by 20%**

Wireless LAN Engineer, _Extreme Networks_.   Apr - Aug 2018
- Automated REST API regression testing by creating Postman workflows to generate requests and JavaScript Assertions to perform validations, **shortened verification process by 60%**
- Managed the verification process for all user profile API endpoints using **Testlink**, meeting Corporate-level API standards

DevOps Engineer, _Toronto Water_.   Jan - Apr 2017
                                                                                  Sept - Dec 2017
- Automated the generation of Asset data analytics using **Python** for data preprocessing and analysis, **shortened asset report generation process by 80%**
- Architected a network design including **IP addressing** and **security architecture** to provide network access to Power Distribution Units located in the company's datacenter
- Collaborated with the native application team to present a desktop virtualization system, successfully transitioning all Toronto-wide plants to the new system technology

Projects

Javalon - Spring Web Service Board Game
- Developed a real-time web service interpretation of the card-based board game "The Resistance: Avalon"
- Designed the fullstack application implementation featuring user authentication, game-rooms, and real-time game synchronization across devices using **WebSockets**, **Spring**, **AngularJS**, and **H2**

Worldly Goods - NodeJS Web Service
- Developed a web application for recording and analyzing user monetary transactions to determine net worth
- Built the front-end infrastructure using **React** and integrated connections to the **MongoDB** database and **NodeJS** back-end using **Express**, and **Axios**

Education

Candidate for B.A.Sc in Computer Engineering, _University of Waterloo_, 3A Term.   2016 - 2021