

Lian Duan

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Education

University of British Columbia

Bachelor of Science In Computer Science

Upper Level GPA: 3.75

Vancouver, BC, Canada

September 2017 - July 2023

Experience

Agile Developer Intern (Infrastructure)

SAP HANA and Analytics

Vancouver, BC, Canada

Sept 2021 - April 2022

- Enabled broad overview of micro-service deployment statuses by implementing a **deployment dashboard**, allowing for rapid response of team members to failing deployments by cutting search times **by up to 75%**.
- Worked on **automation** for verification and whitelisting of valid API requests for SAP HANA's Data Collection Service, responsible for ingesting and aggregating data within SAP micro-services.
- Updated, maintained and deployed **micro-services** belonging to the **SAP S4/HANA Enterprise Resource Planning (ERP)** suite utilized by over **17,500 companies** globally to provide real time analytics for their data.

Web Software Developer Intern

FORM

Vancouver, BC, Canada

May, 2020 - Sept 2020

- Developed, updated and maintained back-end **REST API** routes utilized by the mobile app for **45,000+ active swimmers** using **TypeScript, MySQL and AWS services**.
- Implemented database, back-end, and API support for "Verified" and "Professional" displayable user badges showcased in the mobile app using **Express and Sequelize**.
- Set up staff alerts on production firmware releases, **increasing automation release coverage by 66%** by using AWS Lambda functions with delivery through AWS SES

Web Applications Developer

LedgerDocs

North Vancouver, BC, Canada

September, 2019 - April 2020

- Reduced the load on server instances **by up to 99.7%** and eliminated server crashing occurrences by implementing a job queue system to distribute high CPU consumption during peak processing hours.
- Implemented an **Optical Character Recognition (OCR) system** responsible for the reading, processing, and parsing of **30,000+ photographic invoices per annual quarter** by including Tesseract onto the existing codebase.
- Proposed and prototyped a Twilio Client and **REST API** that allows for communication with the web platform through SMS text using Node.JS with Ngrok.io, Express.JS and Twilio NPM Modules.

Projects

Pyead Crab

JavaScript, Express, React, D3, Python

- Lead the development on a team to write a **python codebase cluster analysis and visualization CLI** tool by overseeing planning, architecture development and deadlines in addition to writing critical code modules.
- Implemented static analysis component through AST exploration on files, grabbing relevant information regarding classes, files and call sequences which enabled **visualization on collected data using D3**.

Walmart Mario Maker

Typescript, Express, React, JavaScript

- Collaboratively worked on a domain-specific language implemented with **Express and React Frontend** that allowed users to write platformer games complete with user definitions, functions, dynamic conditionals and actions checks in a custom language resembling JSON.
- implemented Built static analysis tool intended for language sanity and legality check.

Skills

Programming Languages

TypeScript, JavaScript, Python, Java, C++, SQL, PHP, HTML+CSS

Frameworks / Libraries

Node, Express, Java Spring, D3, Vue.js, OAuth, JQuery

Technical Tools

Git, Jira, Jenkins, Cloud Foundry, Oracle Cloud, AWS SES, Brew, Maven

Testing Tools

Jest, Mocha, Chai, Postman, JUnit

Environments

MacOS, Linux (CentOS & Ubuntu)