Lian Duan

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EDUCATION

University Of British Columbia

Vancouver, BC

BSc, Computer Science: 3.75 Upper Level GPA

Expected Graduation May 2023

Work Experience

SAP

September 2021 – April 2022

Agile Developer Intern (Infrastructure Team)

Vancouver, BC

- Spearheaded verification and whitelisting of valid API requests on SAP analytic's data collection service, enforcing strict standardization on non-standard API fields involved in aggregating data within all analytic micro-services.
- Prevented critical security vulnerabilities from reaching production within cloud services through auditing, sun-setting, and migrations of code-base from deprecated dependencies.
- 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%.

FORM

April 2020 – September 2020

Web Software Developer Intern

Vancouver, BC

- Updated Vue.js admin dashboards to allow engineers to quickly audit, profile, and update relevant user, action and firmware information without having to manually trigger actions.
- 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.

LedgerDocs

September 2019 – April 2020

Web Applications Developer Intern

 $Vancouver,\ BC$

- 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.
- Prototyped user SMS document uploading to the web application using a Twilio client and REST API built onto existing backend infrastructure.

Projects

Walmart Mario Maker | TypeScript, Express, React, JavaScript

November 2022

- Worked on a team to write a domain-specific language and engine implemented with Express and React that allowed users to write platformer games in a JSON-like format.
- Implemented dynamic conditional statements and actions such that user can provide an array of conditions to be checked with an array of actions to perform on pass.
- Built static analysis tool intended for language sanity and legality checks.

PyeadCrab | Python, PythonAST, React, HTML Canvas

December 2022

- 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.
- Consulted and assisted in building dynamic logger which injects tracer code into python repositories and logged critical function caller, callee and class information for analysis.

SKILLS

Languages: TypeScript, JavaScript, Java, SQL, PHP, Python

Frameworks/Libraries: Node, Express, Java Spring, HANA Studio, OAuth, JQuery, Vue.js

Testing Tools: Jest, Mocha, Chai, JUnit

Developer Tools: Git, Jira, Jenkins, Cloud-Foundry, Postman, AWS SES, Brew, Maven