

ERNEST LIAN

Aspiring Computer Scientist

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EXPERIENCE

Backend Developer

Shopify

Sep 2020 – Dec 2020

Montreal, QC (Remote)

- Discovery Experience Team

Software Engineer

StackAdapt

Jan 2020 – Apr 2020

Toronto, ON

- Developed the ad campaign backend workflow in **Rails**, integrating the ability to bulk edit simultaneously for 3000+ live campaigns
- Overhauled campaign flight **RESTful** API schema and database migrated 20,000+ active records
- Designed reusable navigation bars, filters for metrics, and search components using **React** and **Redux** for campaign tracking
- Implemented progressive loading to ensure successful fetch of audience segments for campaign geographical targeting
- Refactored user API permissions, allowing slack integrations

Software Engineer

Lifion by ADP

May 2019 – Aug 2019

New York City, NY

- Directed the development of a real-time performance analytics interface using **Node.js** for analyzing HTTP Requests, improving the efficiency of client application processing by 53%
- Redesigned ETL's logging architecture, impacting 50,000+ **Kibana** log entities, reducing average triaging time of production issues by 46%
- Triaged critical module vulnerabilities within the ETL pipeline by deploying service patches, mitigating security gate risks by 30%

Backend Developer

Bespoke Metrics

Sep 2018 – Dec 2018

Toronto, ON

- Designed an advanced search feature in **Python** using the **Elasticsearch** engine, decreasing querying latency by 39%
- Integrated a subcontractor watchlist, optimizing user experience of prequalification processing in 2000+ companies
- Developed a **Flask** based **Docker** microservice to consume and publish **RabbitMQ** events asynchronously, improving performance by 21%

Software Developer

OpenText Corporation

Jan 2018 – Apr 2018

Waterloo, ON

- Built integration tools to improve the user experience by streamlining the development process, enhancing software installation time by 27%

SKILLS

Languages

C++

C

Python

Java

Ruby

C#

Bash

HTML5

CSS3

Javascript

SQL

Scheme

Tools and Frameworks

Rails

React

Node.js

Git

Docker

Flask

Kubernetes

Redis

AWS

RabbitMQ

Express

Elasticsearch

mongoDB

SVN

Selenium

Mocha

Jest

PROJECTS

Spotilytics | May 2020

- Developed a Spotify analytics platform using **React** and **Material-UI**, integrating **scikit-learn** with **Python**, to recommend artists following a tempo and energy based analysis on requested music

Moodsic | Dec 2018

- Performed sentiment analysis using Indico's API and **Python** to mine through Spotify playlists, recommending mood based music in a **Flask** application

Real-time Canvas | Jun 2018

- Adopted the **Model View Controller** strategy to implement a sketching canvas in **Java** which supports animations, dynamic layout, 2D graphics and widget libraries

EDUCATION

Bachelor of Computer Science - Business Option

University of Waterloo

Sep 2015 - Apr 2021

- Relevant Courses:** Operating Systems, Data Structures, Algorithms, Computer Networks, Database Management, Compilers

HOBBIES

- Foosball, Embroidery, Travelling, Collecting Vinyls