Nathan Li

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Experience

Software Development Engineer – Amazon *Summer 2021*

Full Stack Elixir Developer Intern – theScore *Summer 2020*
- Combined and deprecated several endpoints into a monolithic **gRPC** endpoint to store and manipulate bet transaction records
- Added the ability to store and manipulate user records, sessions and wallet activities for theScore's mobile betting experience written with **Ecto** queries and **Elixir**
- Improved app push notification race conditions by implementing **NATS** messaging and **Oban** job processing between different services to increase concurrency

Software Developer Intern – FreshBooks *Winter 2020*
- Created payments page with ability to review and update invoices, allowing **thousands of users** to adopt the new FreshBooks platform
- Developed new API endpoints in payments service to surface relevant data for the page with **Flask** and **SQLAlchemy**
- Implemented asynchronous processing of WePay instant payment notifications to prevent API overloading

Full Stack Developer Intern – Ada *Summer 2019*
- Applied dynamic time zone conversions on queries for the analytics dashboard, **increasing accuracy of metrics by 40%**
- Developed hourly filtering on charts and tables to increase flexibility and improve insights of chatbot analytics
- Created graph of chatbot answer containment rate on the analytics overview page using **PostgreSQL**, **React** and **Redux**
- Implemented automated database migration system for an **ELT pipeline** using **Airflow** and **Python**

Software Developer – enLIGHT *Winter 2019*
- Developed web platform to connect student startups and young entrepreneurs with industry professionals
- Implemented database schema and **AWS S3** storage to handle user information using **Flask** and **SQLalchemy**
- Created front end user profile and edit profile capabilities with **jinja2** templates to dynamically render HTML pages

Projects

Musical Sentiment Analysis *Fall 2020*
- Predicted emotion from songs and clustered them into groups using a **neural network classifier** and **k-means clustering**.

Applied ⓞ *Fall 2020*
- Created a job application tracker to aggregate third party data metrics such as **Google Maps** and **Glassdoor**

Skills

Languages
Python
JavaScript
Java
Elixir
C++

Frameworks
Flask
React
Redux
Ember.js
Node.js

Databases
SQL
AWS Redshift
MongoDB
Firebase

Tools & Technologies
SQLAlchemy
Apache Airflow

Other Projects
Workout App ⓞ
Tabb ⓞ

Education

University of Waterloo
Mechatronics Engineering
Option in Artificial Intelligence
UC3M
Exchange Term
Fall 2019

Relevant Courses
Data Structures & Algorithms
Computer Structures & Real Time Systems