

FRANK LIANG

3rd Year Computer Engineering

👤 <https://zcliang97.github.io>

🐙 <https://github.com/zcliang97>

🌐 <https://www.linkedin.com/in/fliang97>

WORK EXPERIENCE

Software Developer | IBM QRadar Security Intelligence

Jan 2018 – Apr 2018

- Architected and created a data-driven security analytics platform in multi-cloud environments
- Wrote REST API endpoints in Python Flask to query AWS log sources and analyze trends to identify and predict cyber attacks
- Designed a database schema in SQLAlchemy for storing security access level data
- Implemented reusable cross-browser components to visualize internal data using ReactJS and PlotlyJS
- Wrote reusable DAL functions to abstract cloud access procedures in AWS and Azure

Full-Stack Developer | NexJ Systems Inc.

May 2017 – Aug 2017

- Improved existing backend security paradigm and integrated the usage of lambda functions written in Scheme to reduce data migration runtime by up to 60%
- Integrated user-based contact suggestions based on statistical probability into the telecommunication services of the main customer relationship management product

Software Developer | KPMG LLP

Sept 2016 – Dec 2016

- Independently created the first release of a Capital Markets data automation and analysis tool that parses trade data from investment banks and mines relevant data to generate reports and identify auditory issues
- Designed SQL schemas, stored procedures, and scripts in MSSQL to store data mined from trade reports

PERSONAL PROJECTS

Stock Visualization

- Created a stock visualization using ReactJS, PlotlyJS, and bootstrap that renders stock data in real-time and highlights significant trends
- Wrote REST API endpoints with Axios in Python to query stock data from AlphaAdvantage API endpoints

Avalon Web

- Created a web application version of the board game Avalon with support for multiple players using HTML, CSS, and JavaScript

EDUCATION

University of Waterloo

Candidate for Bachelor of Applied Science in Computer Engineering – Class of 2020

SKILLS

Languages: Python • JavaScript • HTML/CSS • C • C++ • Java • Scheme • SQL • VHDL

Tools and Libraries: Git • NPM • ReactJS • Flask • Axios • Boto3 • Webpack • Plotly • Bootstrap • Pytest

Environments and Services: AWS • Azure • IBM Cloud • Windows • Linux/Ubuntu