Bill Wang

billwang80.github.io | b334wang@uwaterloo.ca | linkedin.com/in/bilwang | github.com/billwang80

EDUCATION

University of Waterloo   Sep. 2018 – Apr. 2023
Candidate for B.A.Sc, Mechatronics Engineering

TECHNICAL SKILLS

Languages: Python, JavaScript, Typescript, Java, PHP, C#, C/C++, HTML/CSS, SQL, NoSQL
Tools: AWS, Google Cloud Platform, Git, Node.js, PostgreSQL, Jupyter, Splunk, Docker, Jenkins, Jest
Frameworks: Django, Flask, Express, React, Redux, VueJS, Tensorflow

EXPERIENCE

Amazon Web Services (AWS)   May 2022 – Aug. 2022
Software Development Engineer Intern
- Implemented event-driven feature to allow customers to create custom email templates and automatically send emails in bulk with **AWS and Typescript**
- Designed scalable microservice architecture and data streams to store and render email templates while allowing over **80 transactions per second** with **DynamoDB, Lambda, SQS, and SES**
- Built mockups and developed UI so users can create/view templates with **ReactJS and Sketch**

Trend Micro   Sep. 2021 – Dec. 2021
Software Reliability Engineer Intern
- Decreased Splunk usage by **200 GB/day, saving $200,000/year** by architecting data storage and migration with **AWS Athena, Lambda, and S3**
- Built data collection services, dashboards, and alarms to ensure product reliability by computing SLA metrics with **AWS, Splunk, and Python**
- Reduced up to **50% of big data processing time** by implementing Python batching algorithm

XE.com   Jan. 2021 – Apr. 2021
Software Engineer Intern
- Developed money transfer web app to serve **100,000+ users** with **VueJS and Javascript**
- Enabled offline customer data synchronization on web/mobile apps using **Java, MVVM, and REST APIs**
- Created exchange rate notifications feature for XE mobile app with over **70 million downloads**
- Improved content delivery performance and site security by integrating a CDN with **AWS Cloudfront**

Qontori   Jun. 2020 – Sep. 2020
Software Engineer Intern
- Spearheaded development of mobile app and backend to allow users to create/save computer vision predictions with **React, Expo, PostgreSQL, and ExpressJS**
- Deployed computer vision models to identify student drawn diagrams using **GCP, Tensorflow, and Docker**

Syngli   Sep. 2019 – Dec. 2019
Software Engineer Intern
- Improved online assessment performance **over 1500 times** by creating new difficulty estimation algorithms with **SQL, PHP, and Python**
- Introduced machine learning predictions to automatically adjust course difficulty and improve the education experience with TensorFlow

PROJECTS

Valineups | *Python, Django, React, PostgreSQL, Heroku*   Apr. 2021 – Jan. 2022
- Developed and designed a full-stack web app to help users execute strategies or lineups in Valorant

Peach Speech | *React, Express, IBM Cloud, Tensorflow, Jupyter*   Dec. 2021 – Jan. 2022
- Developed an app to record users and give public speaking feedback based on word choice and tone

Peakview | *Django, PostgreSQL*   Oct. 2020 – Nov. 2020
- Developed a blogging website where users can create accounts, make posts and have discussions