

Howard Yang

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WORK EXPERIENCE

Tesla

Aug 2023 – Present

Software Engineer Intern

Austin, TX, USA

- Led the reduction of AWS costs by \$30k/month after migrating critical lambda functions and cloud resources to an on-premises pub-sub solution using **Golang, PostgreSQL, and Apache Kafka**
- Saved 100 hours of developer time per year by creating custom Github Actions across 5 different repositories to run integration tests and deploy to **Kubernetes and ArgoCD**

Groupr

Oct 2022 – Mar 2023

Lead Developer

Remote

- Co-Founded a startup to create a match-making web app aiding in the formation of hundreds of total teams
- Received repeat invitations to be utilized again in the following years after deploying the application at **several hackathons**, resulting in **50** teams being created from a complex match-making algorithm
- Delivered a working prototype to market in **2 months** after leading the development of the **Django REST** backend with **7 developers**, designing the architecture, and directing weekly SCRUM meetings

Hitachi - Thales

May 2022 – Dec 2022

Software Analyst Intern

Toronto, ON, Canada

- Overhauled a safety-critical software tool used for visualizing and editing railway designs by updating the runtime environment to **Electron**, leveraging **web sockets** and shifting to **ASP.NET** with **microservice architecture**
- Architected a custom **end-to-end testing** library built on **Playwright** and integrated with the **Jenkins** CI/CD build pipeline, reducing regression testing time by 90%
- Boosted end-user productivity with the addition of 30+ new features, using **VueJS** to create custom components

Farmlink

Sept 2021 – Dec 2021

Software Developer Intern

Winnipeg, MA, Canada

- Developed a full-stack application using **Agile Scrum, VueJS, REST APIs, and CRUD** operations with **90%** test coverage via **Jest** and close collaboration with the product owner
- Reduced request latency by 40% by optimizing a **MySQL** database query using a **Python** script and custom SQL queries to partition 10+ million stale rows in the main **MySQL** table
- Employed **web scraping** to gather and clean geographical data points from dozens of government sources, resulting in a comprehensive set of map data points for geofencing applications

PROJECTS

Light-Weight: Rendering Engine | [GitHub](#)

C++, OpenGL, GLSL, ImGui, GPU Programming

- Released an open-source application for rendering photo-realistic scenes using Monte-carlo techniques

Medical Scheduling Mobile App | [GitHub](#)

Java, Android Studio, Mockito, Firebase

- Created a mobile android app allowing doctors and patients to book and track upcoming appointments

EDUCATION

University of Toronto

Toronto, Canada

B.Sc. Computer Science; GPA: 3.8/4.0

Sep 2020 – Jan 2025

- **Relevant coursework:** Engineering Large Software Systems, Operating Systems, Computability & Complexity Theory, Computer Hardware Organization, Artificial Intelligence, Databases, Data Structures & Algorithms
- **Hack the Valley Executive:** Spearheaded development of a Django app used to scan over 300+ applicants at entry

SKILLS

Languages: Python, Golang, Java, Scala, C, C++, Javascript/TypeScript, C#, Bash, SQL

Frameworks/Libraries: React, Vue, Django, ASP.NET, GORM, Express, Unity

Databases: PostgreSQL, MongoDB, MySQL, SQLite, Firebase, Neo4J

Technologies: Git, Docker, Kubernetes, Jira, Jenkins, NodeJs, Android Studio, Electron