ADAM DING

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CONNECT

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LANGUAGES

Golang
Python
C++
C
Java
JavaScript
SQL

FRAMEWORKS/TOOLS

Node.js, React, Redux,
Django, React Native,
TensorFlow, Git, AWS,
PostgreSQL, MySQL, Firebase,
MongoDB

EDUCATION

University of Waterloo   **2023**
Bachelor of Applied Science
in Computer Engineering

FUN FACTS

- I am the recipient of the **WCHS Male Vocalist of the Year** Award
- I can eat 12 slices of pizza in **15 mins**
- The world's heaviest bench press is **1,102 lbs** by Paul Meeker
- My max bench is **225lbs**

EXPERIENCE

Backend Developer – *Sandvine*   Jan. 2021 – Apr. 2021
- Implemented features in the **Network Data Analytics Function (NWDAF)** as defined by the **5G Core architecture** using **Golang.**
- Built a **multi-threaded** pipeline for initialization tasks to increase data collection microservice startup time by 2.5x.
- Designed and implemented the workflow for tracking and managing subscriptions made towards network-functions on NWDAF.
- Developed the **data access layer** for **Vertica** and **MySQL** databases for the NWDAF Data Collection microservice in **Golang.**

Full-Stack Developer – *KnowHow*   May. 2020 – Aug. 2020
- Independently architected an **analytics dashboard** to aggregate and visualize customer-product engagement metrics and MRR data with **AWS Lambda**, **Chart.js**, and **Pycopg2**.
- Implemented a secure user refund and cancellation workflows on their annual subscriptions with **Python** and the **Stripe API.**
- Improved our product initial load time by 33% by integrating system wide **lazy loading** of images by retrieving resized images using **AWS Lambda** and **S3**.

Firmware Developer – *Midnight Sun Solar Rayce Car*   Aug. 2019 – Feb. 2020
- Designed and wrote software in **C** for the car's **front power distribution** to supply power to components, using **CAN Bus** for cross microcontroller communication.

PROJECTS

⊙ **Neural Net Minus** – *github.com/wqding/Neural-Net-Minus*
- Designed and programmed a neural network library **from scratch** capable of generating **neural networks of any configuration**
- Implemented the back-propagation algorithm using **stochastic gradient descent**, leveraging multi-variable calculus and linear algebra concepts.

⊙ **SUNify** – *github.com/wqding/SUNify*
- Built and trained a **CycleGAN** image processing model in **Tensorflow** to generate sunny images from cloudy images.

⊙ **Productive Ambience** – *github.com/wqding/Productive-Ambience*
- Developed and deployed a **MERN stack (Mongo, Express, React, Node)** app using **AWS** to create custom auditory environments and boost productivity.