## **TECHNOLOGIES**

## Languages:

JavaScript, Python, Java, C++, C

#### **Web Development:**

Node.js, React, JQuery, Spring, Handlebars, Apache Velocity

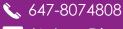
#### Database:

MongoDB, Mongoose, SQL, PostgreSQL

Machine Learning: Tensorflow

#### **CONNECT**





in /Adam Ding



## **EDUCATION**

#### UNIVERSITY OF WATERLOO

Computer Engineering Honors 2018 - 2023

#### **ACHIEVEMENTS**

### Western Canada High School

- Male Vocalist of the Year
- Honor Society Lifetime Member

#### **Government of Alberta**

- Alexander Rutherford Scholarship (\$2500)

#### VOLUNTEERING

**Bethany Retirement Living**Church service assistant

# ADAM DING

adamding.me

## **EXPERIENCE**

**Software Developer** – DragonAgile Consulting Inc. Aug. 2019 – Dec. 2019

- Spearheaded the development and deployment of a full stack app for the JIRA Suite using Node.Js, Java, and Atlassian JS+REST APIs to protect and manage sensitive information in issues (900+ users)
  - Visualized data from the Google Data Loss Prevention API to automatically detect sensitive information
  - o Architected symmetric encryption pipeline leveraging Crypto.js to securely store protected information on Atlassian's database
- Consulted clients developing software for JIRA Cloud

**Firmware Engineer** – Midnight Sun Solar Rayce Car Aug. 2019 – Present

- Designed and programmed software in C for the car's front power distribution to supply power to specific components as required
  - Utilized **CAN Bus network** for cross microcontroller communication

#### **Software Engineer** – PointClickCare

Jan. 2019 - Apr. 2019

- Automated the data processing of 1134 entries from the Medicare.gov API by
  developing an internal application in Java, following ORM methodologies with
  the Java Persistence API; removed the need for weekly cross team
  collaboration
- Implemented 9 new rules to internal Drools rule engine repository; enhanced flagship product's ability to detect conflicts in user input by 14%

## **PROJECTS**

Productive Ambience – pa.adamding.me

Sep. 2019 - Dec. 2019

- Built and deployed a MERN stack (Mongo, Express, React, Node) app to create custom sonic environments and boost productivity
- Implemented password salting using brcypt, and jwt authentication; allowing users to save/load multiple configurations

## SUNify

Nov. 2019 - Dec. 2019

- Built a CycleGAN image processing model in Tensorflow and trained it using upaired data to generate sunny images from cloudy images
- Programmed an input pipeline to apply various data augmentation techniques to images: Random Jittering, Mirroring, and Cropping

# Neural Net Minus

Sep. 2019 - Nov. 2019

- Designed and built a neural network library **from scratch** capable of generating **fully connected neural networks of any shape**
- Implemented the back-propagation algorithm using gradient descent, leveraging multi-variable calculus and matrix math
- Programmed the model prediction pipeline by following the feed forward algorithm and performing complex matrix operations using the numpy library