# Yap Wei Lok

#### **WORK EXPERIENCE**

## **Continental Automotive**

May. 2018 - Aug. 2018

Research Intern

Singapore

- Researched on automotive electrical control unit (ECU) bootloader security
- Proposed and presented proof-of-concept ECU secure boot protocol written in C

## **EDUCATION**

# Singapore University of Technology & Design

Dec. 2019

BS, Computer Science

Singapore

- Most recent GPA: 4.0 / 5.0
- Relevant coursework: Software Engineering, Machine Learning, Deep Learning, Security, Algorithms etc.
- Treasurer of Skate club in 2018, Member of Volleyball club in 2017

#### **SKILLS & INTERESTS**

- Skills: Web Backend Flask, Django, Heroku, SQL (novice), MongoDB (novice) | Web Frontend HTML, CSS, JavaScript, JSX, ReactJS | Others Python, Java, C++, C (novice) | Misc PyTorch, Bash, Unix, Git, LaTeX
- Languages: English fluent | Chinese basic (conversation and written) | Japanese basic (conversation)
- Interests: Meeting like-minded people | Problem solving | New technology | Japanese culture

# **PROJECTS**

**NVIDIA AIRA** 

Jan. 2019 – Aug. 2019

Backend / Data Pipeline

- Capstone project in collaboration with researchers at NVIDIA Artificial Intelligence Technology Center, SG
- Contributed in Django backend and designed data / text processing pipeline with Python
- Rated 20% more user-friendly as compared to existing tools like Frase.io by beta testers
- Nominated for outstanding projects in SUTD Capstone Presentation 2019

## **LANL Eartquake Prediction**

Apr. 2019 - May. 2019

Deep Learning

- PyTorch deep learning application to forecast earthquakes based on laboratory acoustic data taken from LANL
- Worked together with 2 other members to implement and compare various existing neural network models
- Best model (PWaves-DenseNet) achieved 2.20 validation mean absolute error (MAE) and 1.69 test MAE

StackerOverflow Feb. 2018 – Apr. 2018

Field Programmable Gate Array (FPGA) Programming

- Homage to the Stacker arcade game
- Implemented using Mojo FPGA in LucidHDL, complete with custom-made game cabinet
- Voted best project of the CSE course 2018 and later showcased in SUTD Open House 2018

Others 2017 – 2019

- 2019: PhotonRT (C++) | PascalVOC image classification (PyTorch)
- 2018: Archwing Ethereum dApp (ReactJS, Solidity) | PyTor Browser (Electron, Python) | Twitter POS Tagging (ML / NLP, Python) | STUDChat (ReactJS, MeteorJS)
- 2017: SG Temple Tour (Android) | ProfChoper (¡Query, Java Spring)