Yap Wei Lok

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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 to Continental engineers around the world via video conference
- Managed Git repository for the proof-of-concept project as well as the related documentations

EDUCATION

Singapore University of Technology & Design **Dec. 2019**
BS, Computer Science *Singapore*

- Relevant coursework: Software Engineering, Machine Learning, Deep Learning, Security, Algorithms etc.
- Treasurer of Skate club in 2018, Member of Volleyball team in 2017

SKILLS & INTERESTS

- **Skills:** Programming Languages – Python, Java, JavaScript, C++, C (novice)
  Web-related – HTML, CSS, ReactJS, Spring (novice), PostgreSQL (novice), MongoDB (novice)
  Others – PyTorch, Bash, Unix, Git, LaTeX
- **Languages:** English (fluent), Chinese (basic), Japanese (basic)
- **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 on Mojo FPGA with 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 Ray-tracer (C++), PascalVOC image classification with CNNs (PyTorch)
- **2018:** Archwing Ethereum dApp (ReactJS, Solidity), PyTor Onion Routing (Electron, Python), Twitter POS Tagging with HMMs (Python), STUDChat Webapp (ReactJS, MeteorJS)
- **2017:** SG Temple Tour App (Android), ProfChoper Webapp (jQuery, Java Spring)