## **Brian Chao**

| 0909552093 | whereisbrianchao520@gmail.com | https://github.com/Mckinsey666/ |

#### **Technical Skills**

| C++ | Python | JavaScript | MATLAB | | English | Chinese |

#### Education

### **National Taiwan University**

2021

Bachelor of Science, Electrical Engineering [GPA 4.24 / 4.3, top 1%, ranked 2/169] (as of 2018)

**Relevant Courses** (selected):

Calculus, Introduction to Computer Science, Computer Programming, Data Structures, Scientific Computing, Probability and Statistics, Discrete Mathematics, Machine Learning, Linear Algebra

## **Projects**

# https://github.com/Mckinsey666/

- bullet [2153 stars on Github]: A python interactive prompts package (6000+ downloads from PvPI as of 3/15, 2019).
- vocabs [205 stars on Github]: A CLI tool to integrate online dictionary to the terminal.
- **Functionally Reduced AIGs (FRAIG) tool:** an AIG (And-Inverter Graphs) circuit reduction tool.
- **Anime Generation:** Generating anime-like faces using Generative Adversarial Networks. (Python)
- Generative Models Collection: Implementation of various machine learning generative models such as autoencoders, generative adversarial networks. (Python)
- **Photo Style Transfer:** Transferring various painting styles to photos (*Python*).
- Reinforcement Learning Pong / Breakout AI: Implementation of several reinforcement learning algorithms, eg: policy gradient, deep Q learning, and etc. (Python)
- **Shoot the DS:** an educational side-scrolling shooting game written with *pygame* to help students learn data structure complexities. (Python)

## **Experience and Awards**

**Undergraduate Research** 

2018~

2019/1~2019/2

- Vision and Learning Lab, under the supervision of Professor Yu-Chiang, Wang.
- WorldQuant LLC Taiwan Research Intern Worked on several quantitative finance alpha ideas.
  - 2018 Meichu Hackathon Enterprise Award (Institute for Information Industry): 1st place Designed and implemented a framework for an air quality management system for office
- Participant of the 2018 ICPC Asia Taipei Regional Contest Honorable Mention
- **Member of NTUEE Student IT Department**
- Dean's List Award\* 3