

# Cheng Hsuan Wu

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吳承軒

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[Github](#)

[Kaggle](#)

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## Education

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National Taiwan University

AUG 2018 - PRESENT

B.S. in Computer Science and Information Engineering

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## Skills

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**Programming Languages :** C, C++, Python, Java, JavaScript

**Got A+ in those courses offered by the CSIE Dept. :**

- Operating Systems
- Probability
- Computer Architecture
- Computer Networks
- Introduction to FinTech
- Introduction to Intelligent Vehicles
- Computer Science and Information Technology II
- Modern Sciences and Science of Mind

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## Projects

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**Machine Learning / Kaggle competition**

- Implemented several methods(in Github) in machine learning to attain different tasks.

**2020 Mei-Chu Hackathon / Host by NTHU & NCTU**

- Developed new products features with the API provided by the company.
- We got 3rd place in the Hackathon.

**Computer Network Projects / C++ Socket Programming**

- 1. Multi-user video streaming with buffering progress.
- 2. Simulated TCP Retransmission & Congestion control.

**RISC-V CPU Core in Verilog**

- Simulated CPU, data memory, and instruction memory.
- Simple design for only fifteen typical instructions.

**Quantitative Trading Team Competition**

- Used [Crypto-Arsenal](#) to write trading strategies.
- Traded BTC/USDT, ETH/USDT, and MIOTA/USDT to achieve higher ROI.

### **System Programming / Linux**

- 1. Implemented process scheduling policies, including FIFO, RR, SJF, and PSJF by modifying Linux kernel.
- 2. Simulated simple banking system supporting I/O multiplexing and content protection.
- 3. Developed a bidding system which could handle a sequence of competitions.
- 4. Simulated user-thread library using longjmp and setjmp functions.

### **Singing Transcription from Polyphonic Music / Host by Aldea**

- Used a given singing voice to get monophonic music notes.
- We tried RNN and rule-based methods which use [madmom](#) to abstract features of audio files.