

Yi-Fan(Jeff) Shih

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EDUCATION

New York University, United States

Sep'19 - May'21

M.S., Computer Science

National Chiayi University, Taiwan

Sep'14 - Jun'18

B.E., Computer Science and Information Engineering

GPA:3.87 / 4.0

- Related Course: **Algorithm**(97/100), **Data Structure**(90/100), **Software Engineering**(95/100)
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EXPERIENCE

Full-stack Web Developer (Part-time), *National Chiayi University*

Dec'15 - Jun'18

- Built the curriculum and course information system for the Department of Chinese Literature for 4000+ users.
- Solved **Linux** server security issues and developed the system in full-end. (**HTML5, JavaScript, PHP, MySQL**)

TA in Algorithm, *Department of Computer Science at National Chiayi University*

Feb'18 - Jun'18

- Lectured and provided feedback for the homework of 100+ students.
 - Built local judgment to compile and test students' code with **Bash**. Shorten **60%** time on marking students' code.
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PROJECTS

Detect and Protect the server from DDoS in Software-Defined Network

Jan'17 - Jun'18

Research project, Inventor

- Reduced the server break-down rate from **90% to 15%** as measured by 7000+ times simulated DDoS attack.
- Protected the server from DDoS attack with OpenFlow-based **SDN** application using RYU framework.
- Enabled website administrators to check/operate the network condition on the switch with the webpage.

Used **Django** framework and **SQLite** for the back-end. (**Python**)

Used **YAML** to deploy SDN switches and their network configurations on **Docker**. (**Linux**)

Visual-experienced Improvement of Dcard (forum-like social network)

Nov'16 - present

Hackathon project, Leader and Software Programmer

- Achieved the visual improvement while received 88% positive feedbacks in 35060 forum users, and this improvement was adopted by the developer team of Dcard at Dec'18.
- Enabled users to surf the wordy forum homepage with a featured picture of each article.
- Fetched the URL of images in the article with Dcard **APIs**, parsed and stored them with **MongoDB**.
- Built the innovative and intuitive reading style of Dcard using **HTML, CSS, PHP, JavaScript**.

Implement SIC/XE Assembler

Feb'17 - Jun'17

Course project, Scrum Master and Software Programmer

- Implemented the SIC/XE assembler that supports the transformation from the assembling code to machine codes.
 - Implemented with **C++** enable our program run at most **30%** faster than other groups who used Python.
 - Adopted the **OOP** feature of **C++** helps our team cooperated efficiently with data encapsulation and inheritance.
 - Led a team to implement SIC/XE assembler, and also devoted to debugging, testing, integrating and being the communication bridge between group members. Used the **Scrum** model as our development principle.
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AWARDS

- **First-Class Academic Excellent Scholarship (Top 1 of 55)**

Sep'16 - Feb'17

Department of Computer and Information Engineering, National Chiayi University, Taiwan

- **2015 ITSA Annual Collegiate Programming Contest (Top 4 out of 64 Teams)**

Jan'15 - Jun'15

C/C++ Algorithms Programming contest at National Cheng Kung University, Taiwan.

- **The Best Design Prize, 2016 Smart City Hackathon (32 Teams)**

Nov'16

Website: Provided users with a newly intuitive forum reading style. National Chiao Tung University, Taiwan.

TECHNICAL SKILLS

Programming Language: C, C++, Java, Python, PHP, JavaScript, HTML, Bash, YAML; **Platforms:** Android;

Software-Defined Network: RYU (OpenFlow-based);

Operating Systems: Linux, Unix, Windows