# 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)

## **TECHNICAL SKILLS**

**Programming Language:** C, C++, Python, PHP, JavaScript, HTML, Bash, YAML; **Platforms**: Android; **Software-Defined Network:** RYU (OpenFlow-based); **Operating Systems:** Linux, Unix Windows

## **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 on my own.
- Solved Linux server security issues and developed the system in full-end. (HTML5, JavaScript, PHP, MySQL)

TA in Algorithm, National Chiavi 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.

## **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 for the back-end. (**Python**)

Used YAML to develop SDN switches and their network configurations.

## 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 in **MongoDB**.
- Built the innovative and intuitive reading style of Dcard using HTML, CSS, PHP, JavaScript.

## **Implement SIC/XE Assembler**

Jun'17

Course project, Scrum Master and Software Programmer

- Implemented the SIC/XE assembler with C++ that supports the transformation from the assembling code to machine codes. (C++)
- 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.

#### Winsocket UDP internet chatroom

Jun'16

Course Project, Software Programmer

- Implemented internet chatroom which supports unicast, multicast and file sharing. (Winsocket.h in C++)
- Programming with the concept of threading techniques, non-blocking and file processing in C++ socket.

## **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 24 Teams)

Jan'15 - Jun'15

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

• The Best Design Prize, 2016 Smart City Hackathon (20 Teams)

Nov'16

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