Yi-Fan(Jeff) Shih

7718 3rd Ave, Brooklyn, NY / +1-(626)-829-3164 / kontonsine@gmail.com / https://github.com/KShih

---

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++, Java, 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 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.

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**. (**Unix**)

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 **OOP,** 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 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.