Chao Wen Chen

Github : https://github.com/George0112

chaowen.nthu@gmail.com
(+886) 931875878

OBJECTIVE

Second year student in ISA@NTHU. Inquisitive, hard-working and consistent. Looking for opportunities to apply my skills and contribute to real-world projects.

EDUCATION

National Tsing Hua University, Taiwan
Bachelor of Engineering, Computer Science and Engineering(CSE)
National Tsing Hua University, Taiwan
Master of Engineering, Institute of Information Systems and Applications(ISA)

TECHNICAL SKILLS

Experienced : AWS, Kubernetes, SQL, Docker
Tools/Framework : Laravel, Vue.js, SwiftUI, React.js, Express, Flask
Languages : Javascript, Python, PHP, C/C++, HTML/CSS

EXPERIENCE

Cloud Security Intern at IBM   **Jul 20 - Dec 20**
We use IBM Cloud Security technology and leverage threat intelligence and SOAR to solve the threat management problem of Taiwan financial industries

Network Manager in CSCC@NTHU   **Aug 19 - Jun 21**
I'm responsible for all the network utilities belong to the department of Computer Science. The job encludes IP management, abuse of network reporting, new function development, etc.

Summer Intern at Administration Yuan   **Jul 18 - Aug 18**
It's a project for checking and revising websites of all departments of the gonvernment. I checked hundreds of websites and give them advices to make it better for daily and mobile usages.

Research Assistant of NMSL@NTHU   **Jun 17 -**
Our research field covers network and all kinds of media. With the trend of AI, we are looking for a better machine learning platfrom to accelerate the development of all kinds of models and improve them even after deployed.

Website Administrator and Developer at ITRI   **Jun 17 - Mar 19**
We developed a website for paper searching and recommending. More than a thousand people have registered and more than 2000 papers are included in this website.

PROJECTS

Dynamic Distributed Deep Neural Network Deployment inEdge-Computing Environment
IoT devices are often computational and energy-limited. Therefore, Deep Neural Network(DNN) models might not fit into a single device. People are trying to solve this restriction by breaking a model into several pieces. However, there isn't a platform to deploy model pieces dynamically. We leverage Kubernetes to build a platform for deploying and managing models in our real-world testbeds.

City in my Drone
A cloud based project for controlling and streaming videos of drones. We orchestrates multiple AWS services such as EC2, S3, lambda, SQS, etc. With this project, we can remote control the drone with user-defined destinations or routes. I also built an IOS app using SwiftUI from scratch.

- **App:** https://github.com/George0112/DroneMaster
- **Demo:** https://www.youtube.com/watch?v=FEIgZtJsIbk

Website of Butterfly Garden

We reconstruct a brand new website of Butterfly Garden in NTHU since the old one isn't suitable for mobile devices. We redesign the database, and follows the MVC pattern by using Laravel and Vue.

- **Link:** http://belc-butterfly.vm.nthu.edu.tw

Streaming Scalable Video Sequences with Media-Aware Network Elements
Realizing a media-aware network element based on P4, an SDN language. We conduct experiments with bmv2 and SVEF. The result shows that we can maintain stable video streaming than regular switches.

- **Link:** https://ieeexplore.ieee.org/abstract/document/8406129

Smart Manufacturing Digital Library
A Laravel based website includes thousands of papers with well arrangement and recommendation. This website can recommend you papers chosen by experts in ITRI and we carefully designed RESTful APIs and follow MVC pattern.

- **Link:** https://industry4.tw/

Publications

[1] G. Wang, **C. Chen**, C. Chen, L. Pan, Y. Wang, C. Fan, and C. Hsu, "Streaming scalable video sequences with media-aware network elements implemented in P4 programming language," in Proc. of IEEE Network Operations and Management Symposium (NOMS'18) Demo Session, Taipei, Taiwan, April 2018, pp. 1–2.

[2] Q. Zhu, M. Uddin, N. Venkatasubramanian, **C. Chen**, and C. Hsu, "Spatio-temporal scheduling of in-Situ and mobile Internet-of-Things devices for urban environment sensing," Ongoing Work.

[3] **C. Chen**, T. Hong, and C. Hsu, "Essential Components of Modern Machine Learning Platforms," Ongoing Work.

Research Grant

[1] Streaming scalable video Sequences with media-aware network elements, MOST Undergraduate Research Project (#107-2813-C-007 -074 -E), $48,000, July 2018 - February 2019