

Chuo-Yun (Joey) Yang

☎ 678-490-5769 | ✉ cyang432@gatech.edu | 🏠 friedcosey.com | 💼 linkedin.com/in/chuo-yun-yang/

PROFESSIONAL EXPERIENCE

Facebook Inc. Menlo Park, CA

May 2019 – Aug. 2019

Software Engineer Intern [Network Analytics Team]

- Improved tagging process rate of network traffic tagging pipeline by 500% resulting in saving 80% of computing resource utilization by changing the tagging service to asynchronous architecture with **C++**
- Reduced the time to insert 30 million rows of queries to database from 20 days to 2 hours without lagging by adopting the asynchronous architecture applied in network tagging processor
- Collected advertised BGP routes and discovered significantly overpaid Internet providers written in **C++** and **Thrift**
- Discovered the optimal task number for network tagging service to limit the lagging resolving time to 30 minutes
- Automated the process of detecting anomaly in network traffic tagging pipeline by integrating monitoring system composed of **Python** scripts with the tagging pipeline

National Chiao Tung University Hsinchu, Taiwan

July 2017 – July 2018

Back End Web Developer Intern

- Built student portal for 1000 users in Department of Computer Science with **Express.js**
- Automated the website to restart in isolated environment when any abnormal event occurred utilizing **Docker** and **PM2**
- Secured the website by implementing login system with **OAuth2.0** and configured reverse proxy with **Nginx**
- Created 50 **Restful APIs** including student graduation status, preferred course sequences, communication between users with authorization based on different user profiles
- Accelerated the website by more than 90% through compressing and serving static files with **Webpack** and **Nginx** and reducing size of bundle.js (generated by **Webpack**) by more than 80%

Accton Technology Hsinchu, Taiwan

July 2017 – Aug. 2017

Software Engineer Intern

- Built different network topologies with **MININET** and **Openflow** protocol to test **ONOS** applications
- Constructed **ONOS** application **vRouter** which utilizes **ONOS**, **Quagga**, and **Open vSwitch** to leverage Software Defined Network concept in network routing management

EDUCATION

Georgia Institute of Technology Atlanta, GA

Expected in May 2020

M.S. in Computer Science (GPA: 4.00/4.00)

- Courses: Advanced Operating Systems, Advanced Software Engineering, Computer Networks, Graduate Algorithms

National Chiao Tung University Hsinchu, Taiwan

Jan. 2018

B.S. in Computer Science (GPA: 3.99/4.00)

- Awards: Academic Achievement Award (4 Semesters; students within top 5%)
- Courses: Data Structures, Algorithms, Cloud Computing, System Administration, Compiler Design

SELECTED PROJECTS

Dog Tracking Interactive Map Internet of Things, Web Development

Aug. 2016 – July 2017

- Integrated dog trackers, PM2.5 sensors, and monitors to campus map with **Google Map API** and **JavaScript**
- Predicted the location of dogs and combined 3 monitors in the campus to show real-time images of dogs by adopting **quadtree** to analyze 250 geolocation records collected from dog trackers

Private Cloud Storage Service Cloud Computing, Web Development

Sept. 2017 – Jan. 2018

- Built middleware of Object Storage **Swift** and a web interface for users to rotate and adjust color of images with **Python**, **Swift APIs**, **React.js**, and **Express.js**
- Created 3 replicas of original object with the probability of losing any object of 1GB size per year $\leq 10^{-11}$

SKILLS

Programming Languages: C/C++, Go, Java, Python, Bash, JavaScript, SQL

Tools and Frameworks: Git, Express.js, React.js, Docker, Nginx, Jenkins

EXTRACURRICULAR ACTIVITIES

Volunteered teaching math and science in Nepal (2012), Colombia (2014), and Taiwan (2015)

National Chiao Tung University School Tennis Team (2014-2018)