

Shen-Fong Hung

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EDUCATION

University of Southern California, Los Angeles, CA

Fall 2018 – Spring 2020

Master of Science in Computer Science

- Overall GPA: 3.9/4.0
- Awards: The Xinran Ji Memorial Scholarship
- Related Courses: Analysis of Algorithms, Foundations of Artificial Intelligence, Operating System, Web Search Engine

National Chiao Tung University (NCTU), Taiwan

Master of Science in Communications Engineering

Fall 2016 – Spring 2017

- Overall GPA: 4.00/4.00
- Research Focus: Communications System Simulations, MAC Layer Networking Protocols, Optimization Theory

Bachelor of Science in Electrical and Computer Engineering

Fall 2012 – Spring 2016

- Ranking: 1/44; Overall GPA: 3.97/4.00; Major GPA: 4.00/4.00

TECHNICAL SKILLS

- **Programming Languages:** Java, C, C++, Python, MATLAB, HTML, CSS, JavaScript
- **Computer Networks:** BGP, IGP (RIP, IS-IS), L2/L3 Networking Protocols, LTE/5G Wireless Technology
- **Others:** Unix/Linux(Ubuntu), Git, AWS, MySQL, MongoDB, TensorFlow, Scikit-learn, Bootstrap, Wordpress

EXPERIENCE

Google

Sunnyvale, USA

Software Engineer Intern

May 2019 – August 2019

- Built status page for network system of Google cloud, which can monitor networks information
- Implemented virtual machine to virtual machine data path health-checkers using C++, multi-threaded programming to detect data-plane failure

Umbo Computer Vision

Taiwan

Software Engineer Intern

July 2017 – October 2017

- Improved QA testing process by developing automated testing script using Python, Selenium, MongoDB under Unix
- Created testing plans for 2 critical and several minor revisions; reviewed 40+ features of product interfaces and functionalities for web, Android App and IOS App; communicated testing results with developers

Mobile Intelligent Network Technology Laboratory –NCTU

Taiwan

Research Assistant

September 2015 – July 2017

- Researched L2/L3 networking protocols for 4G/5G wireless networks with green communications technologies
- Designed two novel MAC layer resource allocation algorithms using nonlinear optimization theory to enhance at least 15% energy efficiency compared to traditional LTE-A networks
- Constructed heterogeneous wireless networks software simulations' environment and programmed proposed algorithm using MATLAB
- Published and presented to 50+ professionals at IEEE Wireless Communications and Networking Conference 2017

Freelance Web Developer

Taiwan

Web Developer

January 2015 – May 2015

- Developed websites for two global firms. Works included The Glenlivet Taiwan's official website (<http://www.theglenlivet.com.tw>) and Aberlour Taiwan's official website (<http://www.aberlour.com.tw/home.html>)
- Coordinated website functionality with website designer; constructed website framework using Wordpress, and modified website layout and functionality to follow designers' design using HTML 5, CSS, PHP, and Wordpress plugin

SELECTED PROJECTS

Weenix Operating System [C, GDB]

- Implemented a Unix like operating system on QEMU (x86 processor emulator) using C
- Performed 3 key kernel functionalities including multiple processes and threads, virtual file system, and virtual memory

Augmented Reality [C++, OpenGL, OpenNI]

- Organized team of 3 in development of an interactive AR application with Kinect sensor and achieved 60% confidence of human skeletons' positions by cross comparison of depth information through OpenNI library
- Improved user experience by creating 3D virtual objects and depth information based shadow effect through OpenGL

TravelMap Android App [Android, Java, PHP, MySQL]

- Built an Android App for tourists to search nearby attractions and view other users' comments
- Designed relational database for attractions and implemented Android backend using PHP and MySQL