

Chun-Feng Wu

Curriculum Vitae

PERSONAL DETAILS

Phone (886) 910-082417
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Program Computer Science & Information Engineering

EDUCATION

PhD. Department of CSIE

2016-NOW

GPA: 4.15/4.30

National Taiwan University, Taiwan

Advisor: Tei-Wei Kuo & Yuan-Hao Chang

Thesis: Process-Aware Resource Management for Low Cost Unified Memory System (Ongoing)

MSc. Department of Computer Science

2014-2016

GPA: 3.90/4.30

National Tsing Hua University, Taiwan

Advisor: Yeh-Ching Chung

Thesis: Hybrid Mechanisms to Improve Write Scenarios for Cloud Storage Services

BSc. Department of CSIE

2010-2014

GPA: 3.72/4.0

National Central University, Taiwan

Advisor: Li-Der Chou

PUBLICATIONS

1. Yu Ting Ho, **Chun-Feng Wu**, Ming-Chang Yang, and Yuan-Hao Chang, "Replanting Your Forest: NVM-friendly Bagging Strategy for Random Forest", IEEE Nonvolatile Memory Systems and Applications Symposium (NVMSA), Hangzhou, China, August 18-21, 2019 (Best Paper Award)
2. Shuo-Han Chen, Ming-Chang Yang, Yuan-Hao Chang, and **Chun-Feng Wu**, "Enabling File-Oriented Fast Secure Deletion on Shingled Magnetic Recording Drives", ACM/IEEE Design Automation Conference (DAC), Las Vegas, Nevada, USA, Jun. 2-6, 2019. (Top Conference)
3. **Chun-Feng Wu**, Ming-Chang Yang, Yuan-Hao Chang, and Tei-Wei Kuo, "Hot-Spot Suppression for Resource-Constrained Image Recognition Devices with Non-Volatile Memory", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD), vol. 37, no. 11, pp. 2567-2577, Nov. 2018.(Integrated with ACM/IEEE EMSOFT 2018)
4. **Chun-Feng Wu**, Ming-Chang Yang, Yuan-Hao Chang, and Tei-Wei Kuo, "Hot-Spot Suppression for Resource-Constrained Image Recognition Devices with Non-Volatile Memory", ACM/IEEE International Conference on Embedded Software (EMSOFT), Torino, Italy, Sep. 30 - Oct. 5, 2018. (Journal Track, Integrated with IEEE TCAD) (Top Conference)
5. **Chun-Feng Wu**, Ming-Chang Yang, and Yuan-Hao Chang, "Improving Runtime Performance of Deduplication System with Host-Managed SMR Storage Drives", ACM/IEEE Design Automation Conference (DAC), San Francisco, USA, Jun. 24-28, 2018. (Top Conference)
6. **Chun-Feng Wu**, Tse-Chuan Hsu, Hongji Yang, and Yeh-Ching Chung, "File Placement Mechanisms for Improving Write Throughputs of Cloud Storage Services Based on Ceph and HDFS", Proceedings of IEEE International Conference on Applied System Innovation (ICASI), Sapporo, Japan, May 2017. (The First Prize Paper Award)

7. Su-Shien Ho, **Chun-Feng Wu**, Jiazheng Zhou, Wenguang Chen, Ching-Hsien Hsu, Hung-Chang Hsiao, and Yeh-Ching Chung. "Distributed Metaserver Mechanism and Recovery Mechanism Support in Quantcast File System", IEEE Computer Software and Applications Conference (COMPSAC), pages 758 - 763, Taichung, Taiwan, July. 2015.

EXPERIENCES

Research Assistant

2017-NOW

EAST Lab, Advisor: Yuan-Hao Chang

Conduct researches, experiments, or implementations related to computer systems such as storage systems, memory systems, embedded systems, computer architecture, energy-efficient designs, multi-core/many-core systems, and neuromorphic computing.

SSBox(NebulaBox)

2014-2016

Sytem Software Laboratory, Advisor: Yeh-Ching Chung

This project aims to provide a private cloud storage for users. Our team designs a distributed storage system, SSBox, with high accessibility and reliability. We provide PaaS layer services for programmers to access our SSBox by RESTful API. In addition, SSBox could endure hundred of thousand of users to access simultaneously.

Virtual Desktop Infrastructure

2014-2015

System Software Laboratory, Advisor: Yeh-Ching Chung

This project aims to provide Virtual Desktops to cost down the hardware price for schools. We apply a real-time virtual desktop based on OpenStack and Docker. Users just need a browser and stable Internet so that users can access different Operating System. We also design a client side by OpenStack APIs and the design makes users to create virtual desktops easier.

Traffic Signs Recognition System

2013-2014

Automotive Electronics Advanced Technology Research, Advisor: Li-Der Chou

This project aims to detect and recognize traffic signs around roads. We use EDR to get videos and leverage Support Vector Machine (SVM) to perform color pre-processing, shape classification and pattern recognition.

SKILLS

Programming Languages

C/C++, Python, Java, Objective-C, C#, Parallel Programming(MPI), VB, PHP, JavaScript

Tools

Docker, OpenStack, Hadoop, Ceph(Thesis), PostgreSQL, Redis, MongoDB

English Certification

TOEFL: 95

AWARDS

1. **Scholarship** in "Student Travel Grants" sponsored by Embedded Systems Week (ESWEEK), 2018.

2. **Scholarship** in "Outstanding Students Conference Travel Grant" sponsored by Foundation for the Advancement of Outstanding Scholarship(傑出人才發展基金會), 2018.
3. **Scholarship** in "The international conference scholarship for young researchers" sponsored by Academia Sinica, 2018.
4. **Top 10%, A-** in "Collegiate Programming Examination" held by ACM-ICPC Contest Council for Taiwan, 2013.
5. **Best Debater Award** in debate competition on "The future of virtual machine software: Xen vs VMware" held in Professor Li-Der Chou's course of "Operating Systems", Department of Computer Science, National Central University Taiwan, 2013.