Yu-Chih Tung

Phone: 734-548-2276

Email: yctung@umich.edu

Website: https://yctung.github.io/

EDUCATION

Sep 13 – Current **University of Michigan**

PhD in Computer Science & Engineering, advised by Prof. Kang G. Shin

GPA 4.00

Feb 10 – Sep 12 **National Taiwan University**

M.S. in Department of Computer Science & Information Theory

GPA 3.90

Sep 06 – Feb 10 **National Chiao Tung University**

B.S. in Department of Computer Science

GPA 3.95   (Ranked first out of 52 people, and graduated in advance)

RESEARCH INTERESTS

Mobile Computing & Wireless Networks

PUBLICATIONS

1. Yu-Chih Tung, K.G. Shin and K.H. Kim, "**Analog Man-in-the-Middle Attack Against Link-Based Packet Source Identification**", ACM MobiHoc, 2016

2. Yu-Chih Tung and K.G. Shin, "**Expansion of Human–Phone Interface By Sensing Structure-Borne Sound Propagation**", ACM Mobisys, 2016

3. Yu-Chih Tung and K.G. Shin, "**EchoTag: Accurate Infrastructure-Free Indoor Location Tagging with Smartphones**", ACM MobiCom, 2015

4. Yu-Chih Tung, S. Han, D. Chen, and K.G. Shin, "**Vulnerability and Protection of Channel State Information in Multiuser MIMO Networks**", ACM CCS, 2014

5. Yu-Chih Tung, Y. Li, W. Wang, and K.G. Shin, "**BumpFree: Real-time Warning for Distracted Pedestrians with Smartphones**," (Under submission)

6. W.L. Shen, Y.C. Tung, K.C. Lee, K.C.J. Lin, S. Gollakota, D. Katabi and M.S. Chen, "**Rate Adaptation for 802.11 Multiuser MIMO Networks**", ACM MobiCom, 2012 **(Best Paper Nomination)**

7. Yu-Chih Tung, W.L. Shen, K.C.J. Lin, "**Rate Adaptation and User Matching for Multiuser MIMO Networks**", ACM S3 Workshops, 2012

8. Yu-Chih Tung, C.F. Chou, K.C.J. Lin, "**Availability is Not Enough: Minimizing Joint Response Time in P2P Storage Systems**", Master thesis (extended version is published in IEEE Systems Journal, 2015)

9. Yu-Chih Tung, K.C.J. Lin, C.F. Chou, "**Bandwidth-Aware Replica Placement for Peer-to-Peer Storage Systems**", IEEE GLOBECOM 2011

10. Yu-Chih Tung, K.C.J. Lin, "**Location-Assisted Energy-Efficient Content Search for Mobile Peer-to-Peer Networks**", IEEE PERCOM Workshops, 2011

HONORS & AWARDS

Rackham International Student (Chia-Lun Lo) Fellowship, 2014

Best Paper Nomination, ACM MOBICOM, 2012

Graduated First Place from CSIE, National Chiao Tung University, 2010

College Student Research Fellowship from National Science Council, Taiwan, 2010

National Chiao Tung University Presidential Awards, 6 semesters, 2006-2010

Scholarship from Taiwan Dao De Zong Huei Institute, 2006

Bronze Bamboo Scholarship from National Chiao Tung University, 2005

WORK EXPERIENCE

Research Internship in Mobility Team, HP Labs, 2015

Four-month internship in CSAIL, Massachusetts Institute of Technology, 2012

Research assistant in Research Center for Information Technology Innovation, Academia Sinica, 2011

iOS/Android application developer in KingFong Corp., 2010

ATTENDED ACTIVITIES

ACM MobiCom 2015 / ACM CCS 2014 / ACM MobiCom 2012

IEEE GLOBECOM 2011

Member of 1st Taiwan Embedded Camp, 2009

Organizer of 51th Anniversary Concert of National Chiao Tung University, 2009

Club leader for Star-Voice (Rock Music) Club in National Chiao Tung University, 2008

FINISHED PROJECTS

ForcePhone : Augmenting force-sensing interface to mobile phones with sound

- Implement force-sensing interface without any new hardware in Android and iOS

EchoTag : Accurate indoor location tagging at 1cm resolution without infrastructure

- Implement location sensing based on active acoustic signature in Android

CSISec : Novel CSI estimation process at MU-MIMO

- Implement malicious attacks based on forged CSI and CSISec protocol in WARP boards

BumpFree : Mobile warning application for distracted pedestrians

- Implement acoustic/visual detection by JNI and OpenCV in Android

TurboRate : Rate adaptation of MU-MIMO system implementation

- Implement required components of rate adaption in MU-MIMO on USRP N200/USRP2

Bandwidth-aware P2P storage systems simulator

- Optimize and simulate bandwidth-aware P2P storage system in Network Simulator 2(NS2)