

Yu-Chih Tung

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<https://yctung.github.io>

OBJECTIVE Internship in 2017

PROFESSIONAL PROJECTS **FORCEPHONE: SOFTWARE-BASED TOUCH FORCE SENSING WITH ONLY BUILD-IN SENSORS**
Can enable touch force sensing at smartphones without installing new hardware
Published in ACM Mobisys 2016

ECHOTAG: INTRASTRUCTURE-FREE LOCATION TAGGING BY SMARTPHONES

Can remember locations of phones accurately via only built-in sensors

Published in ACM MobiCom 2015

CSISEC: SECURE CSI ESTIMATION PROCESS FOR MU-MIMO

Enhances the physical security by addressing the “forged-CSI” attack

Published in ACM CCS 2014

TURBORATE: RATE ADAPTATION FOR MU-MIMO SYSTEMS

Adapts optimal rate and achieve 3x throughput of MU-MIMO

Published in ACM MobiCom 2012 (Nominated for best papers)

INTRESTS Mobile Computing & Optimization / Wireless Networks & Security

&SKILLS Linux/C++/Python/Java/Matlab/libSVM/JNI (used to build my projects)

WORKING HISTORY **RESEARCH ASSISTANT INTERN**
HP Labs, 2015

RESEARCH INTERN

CSAIL, MIT, 2012

RESEARCH ASSISTANT

Academia Sinica, Taiwan, 2011

IOS/ANDROID APP DEVELOPER

KingFong Corp., Taiwan, 2010

EDUCATION **UNIVERSITY OF MICHIGAN**

PhD in Computer Science & Engineering, advised by Prof. Kang G. Shin, GPA 4.00

NATIONAL TAIWAN UNIVERSITY

M.S. in Department of Computer Science & Information Theory, GPA 3.90

NATIONAL CHIAO TUNG UNIVERSITY

B.S. in Department of Computer Science, GPA 3.95 (ranked first, and graduated in advance)

HONORS & AWARDS **RACKHAM INTERNATIONAL FELLOWSHIP**

University of Michigan, 2014

BEST PAPER NOMINATION

ACM MobiCom, 2012

GRADUATED AS FIRST PLACE

National Chiao Tung University, 2010

COLLEGE STUDENT RESEARCH FELLOWSHIP

National Science Council, 2010

CLUB LEADER

StarVoice (rock music club composed by 100+ students), 2009

ACADEMIC PUBLICATIONS **EXPANSION OF HUMAN-PHONE INTERFACE BY SENSING STRUCTURE-BORNE SOUND PROPAGATION**

Yu-Chih Tung and K.G. Shin, ACM Mobisys 2016

ANALOG MAN-IN-THE-MIDDLE ATTACK AGAINST LINK-BASED PACKET SOURCE IDENTIFICATION

Yu-Chih Tung, K.G. Shin, and K.H. Kim, ACM MobiHoc 2016

ECHOTAG: ACCURATE INFRASTRUCTURE-FREE INDOOR LOCATION SENSING WITH SMARTPHONES

Yu-Chih Tung and K.G. Shin, ACM MobiCom 2015

VULNERABILITY AND PROTECTION OF CHANNEL STATE INFORMATION IN MULTIUSER MIMO NETWORKS

Yu-Chih Tung, S. Han, D. Chen, and K.G. Shin, ACM CCS, 2014

BUMPFREE: REAL-TIME WARNING FOR DISTRACTED PEDESTRIANS WITH SMARTPHONES

Yu-Chih Tung and K.G. Shin (submitted to IEEE TMC)

RATE ADAPTATION FOR 802.11 MULTIUSER MIMO NETWORKS

W.L. Shen, Y.C. Tung, K.C. Lee, K.C.J. Lin, S. Gollakota, D. Katabi and M.S. Chen, ACM MobiCom, 2012 (Best paper nomination)

RATE ADAPTATION AND USER MATCHING FOR MULTIUSER MIMO NETWORKS

Yu-Chih Tung, W.L. Shen, K.C.J. Lin, ACM S3 Workshops, 2012

AVAILABILITY IS NOT ENOUGH: MINIMIZING JOINT RESPONSE TIME IN P2P STORAGE SYSTEMS

Yu-Chih Tung, C.F. Chou, K.C.J. Lin, Thesis

BANDWIDTH-AWARE REPLICA PLACEMENT FOR PEER-TO-PEER STORAGE SYSTEMS

Yu-Chih Tung, K.C.J. Lin, C.F. Chou, IEEE GLOBECOM 2011