

EDUCATION

- Ph.D., Rutgers University** *August 2008 - May 2013*
 Department of Computer Science & Wireless Information Network Laboratory (WINLAB)
 Thesis: *Enriching Communication Methods for Composable Mobile Systems*
 Dissertation committee:
 Marco Gruteser, Dipankar Raychaudhuri, Richard Martin, and Jennifer Rexford (Princeton University)
- B.S., Hanoi University of Technology, Viet Nam** *August 2001 - June 2006*
 Department of Computer Science
 Thesis: *Design, Implementation, and Monitoring Tools for HUT Campus Wireless Networks*
 Adviser: Khanh Nguyen Kim

APPOINTMENTS

- University of Colorado, Boulder, CO, USA** *March 2017 - present*
Assistant Professor of Computer Science - Founder and Director of MNS Laboratory
Assistant Professor of Pediatrics - School of Medicine
Fellow - Institute of Cognitive Science
- Now Vitals Inc., CO, USA** *Jan 2018 - Present*
Founder & CTO
- Earable Inc., CO, USA** *June 2018 - Present*
Founder & President
- University of Colorado, Denver, CO, USA** **July 2013 - August 2017**
Assistant Professor - Founder and Director of Mobile and Networked Systems Laboratory
- Rutgers University, WINLAB, NJ, USA** **May 2009 - July 2013**
Graduate Research Assistant with Marco Gruteser and Dipankar Raychaudhuri
- Microsoft Inc., Redmond, WA, USA** **Jun-Sep 2011**
Summer Internship, Active Directory Group with Scott Robinson
- Princeton University, Princeton, NJ, USA** **Jun-Sep 2010**
Summer Internship, Department of Computer Science with Jennifer Rexford
- Dept. of Computer Science, Rutgers University, NJ, USA** **Jan-May 2009**
Graduate Research Assistant with Thu Nguyen
- Network and Information Center, Hanoi University of Technology, Viet Nam**
Research Associate **Aug 2006-Jan 2008**

SELECTED HONORS & AWARDS

- **Google Faculty Research Award** **2018**
- **Best Paper Award Runner-up, SenSys 2018** **2018**
- **Best Paper Award Nominee, SenSys 2017** **2017**
- **ACM SIGMOBILE Research Highlight** **2017**
- **ACM Research Highlight in CACM** **2016**
- **ACM SIGMOBILE Research Highlight** **2016**
- **Best Paper Award, SenSys 2016** **2016**
- **Best Paper Award, MobiCom 2017 S3 workshop** **2017**
- **Best Paper Award, MobiCom 2016 S3 workshop** **2016**
- **Creative Research Interdisciplinary Fellow, UC Denver** **2015**
- **Google Faculty Research Award** **2014**
- **Best Paper Award, Mobicom 2012** **2012**
- **Best Paper Award, Mobicom 2011** **2011**
- **InterDigital Innovation Challenge Finalist** **2012**
- **Qualcomm Innovation Fellowship Finalist** **2011**

PUBLICATIONS

Refereed Conferences

1. *CapBand: Battery-free Successive Capacitance Sensing Wristband for Hand Gesture Recognition*; Hoang Truong, Shuo Zhang, Ufuk Muncuk, Phuc Nguyen, Nam Bui, Anh Nguyen, Qin Lv, Kaushik Chowdhury, Thang Dinh, and Tam Vu
The ACM Conference on Embedded Networked Sensor Systems(**ACM Sensys**), 2018
(Acceptance ratio: 15.6%)
BEST PAPER AWARD RUNNER-UP
2. *Body-Guided Communications: A Low-power, Highly-Confined Primitive to Track and Secure Every Touch*; Viet Nguyen, Mohamed Ibrahim, Hoang Truong, Phuc Nguyen, Richard Howard, Marco Gruteser and Tam Vu
The ACM International Conference on Mobile Computing and Networking(**ACM MobiCom**), 2018
(Acceptance ratio: 22.5%)
3. *TYTH-Typing On Your Teeth: Tongue-Teeth Localization for Human-Computer Interface*; Phuc Nguyen, Nam Bui, Anh Nguyen, Hoang Truong, Abhijit Suresh, Matthew Whitlock, Duy Pham, Thang Dinh, and Tam Vu
ACM International Conference on Mobile Systems, Applications and Services(**ACM MobiSys**), 2018
(Acceptance ratio: 26.8%)
4. *PhO2: Smartphone based Blood Oxygen Level Measurement Systems using Near-IR and RED Wave-guided Light*; Nam Bui, Anh Nguyen, Phuc Nguyen, Thang Dinh, Robin Deterding and Tam Vu
The ACM Conference on Embedded Networked Sensor Systems (**ACM SenSys**), 2017
(Acceptance ratio: 14.3%)
BEST PAPER AWARD NOMINEE
5. *Outward Influence and Cascade Size Estimation in Billion-scale Networks*
Hung Nguyen, Tri Nguyen, Tam Vu, and Thang Dinh
The ACM Int. Conf. on Measurement and Modeling of Computer Systems (**SIGMETRICS**), 2017
(Acceptance ratio: 14.3%)
6. *Thermal-Depth Fusion for Occluded Body Skeletal Posture Estimation*
Shane Transue, Phuc Nguyen, Tam Vu and Min-Hyung Choi
The IEEE/ACM International Conference on Connected Health: Applications, Systems and Engineering Technologies (**IEEE/ACM CHASE**), 2017
7. "Matthan: Drone Presence Detection Using Physical Signatures in the Drone's RF Communication"
Phuc Nguyen, Hoang Truong, Mahesh Ravindranathan, Anh Nguyen, Richard Han, and Tam Vu
ACM International Conference on Mobile Systems, Applications and Services(**ACM MobiSys**), 2017
(34 out of 188 submissions, acceptance ratio: 18%)
ACM SIGMOBILE Research Highlight 2017
8. "Battery-Free Identification Token for Touch Sensing Devices"
Phuc Nguyen, Ufuk Muncuk, Ashwin Ashok, Kaushik R Chowdhury, Marco Gruteser and Tam Vu
ACM Conference on Embedded Networked Sensor Systems (**ACM SenSys**), 2016
(21 out of 119 submissions, acceptance ratio: 17.6%)
9. "A Lightweight And Inexpensive In-ear Sensing System For Automatic Whole-night Sleep Monitoring",
Anh Nguyen, Raghda Alqurashi, Zohreh Raghebi, Farnoush Banaei-kashani, Ann C. Halbower, Tam Vu
ACM Conference on Embedded Networked Sensor Systems (**ACM SenSys**), 2016
(21 out of 119 submissions, acceptance ratio: 17.6%)
BEST PAPER AWARD, CACM & ACM SIGMOBILE RESEARCH HIGHLIGHT
10. "Android Permission Recommendation using Transitive Bayesian Inference Model"
Bahman Rashidi, Carol Fung, Anh Nguyen and Tam Vu
European Symposium on Research in Computer Security (**ESORICS**), 2016

11. "Real-time Tidal Volume Estimation using Iso-surface Reconstruction"
Shane Transue, Phuc Nguyen, Tam Vu and Min-Hyung Choi
IEEE Int. Conf. on Connected Health: Appl., Sys. and Engineering Tech (**IEEE CHASE**), 2016
12. "Continuous and Fine-grained Breathing Volume Monitoring from Afar Using Wireless Signals"
Phuc Nguyen, Xinyu Zhang, Ann Halbower, Tam Vu
IEEE International Conference on Computer Communications (**IEEE INFOCOM**), 2016.
(300 out of 1644 submissions, acceptance ratio: 18.25%)
13. "Low-Power Radio-Optical Beacons For In-View Recognition"
Ashwin Ashok, Chenren Xu, Tam Vu, Marco Gruteser, Richard Howard, Yanyong Zhang, Narayan Mandayam, Wenjia Yuan, Kristin Dana
IEEE 82nd Vehicular Technology Conference (**IEEE VTC**), 2015
14. "mSleepWatcher: Why didnt I sleep well?"
Anh Nguyen, Raghda Alqurashi, Ann C. Halbower, Tam Vu
International Conference on Modeling of Complex System and Environment (**ISSAT MCSE**), 2015
15. "Dude, Ask The Experts!: Resource Access Permission Recommendation with RecDroid",
Bahman Rashidi, Carol Fung, Tam Vu
IFIP/IEEE International Symposium on Integrated Network Management (**IEEE IM**), 2015
16. "Sensing Occupant Comfort using Wearable Technologies: A Pilot Study"
Caroline Clevenger, Moatassem Abdallah, Tam Vu, Anh Nguyen
ASCE Construction Research Congress - American Society of Civil Engineers (**ASCE CRC**), 2015
17. "Detection of On-Road Vehicles Emanating GPS Interference"
Gorkem Kar, Hossen Mustafa, Yan Wang, Yingying Chen, Wenyuan Yu, Marco Gruteser, Tam Vu
ACM Conference on Computer and Communications Security (**ACM CCS**), 2014
(114 out of 585 submissions, acceptance ratio: 19%)
18. "Enabling Vehicular Networking through the MobilityFirst Internet Architecture"
Akash Baid, Shreyasee Mukherjee, Tam Vu, Kiran Nagaraja, Junichiro Fukuyama, Dipankar Raychaudhuri
IEEE Int. Symp. on a World of Wireless, Mobile and Multimedia(**IEEE WoWMoM**), 2013
(28 out of 148 submissions, acceptance ratio: 18.9%)
19. "Distinguishing Users with Capacitive Touch Communication"
Tam Vu, Akash Baid, Simon Gao, Marco Gruteser, Richard Howard, Janne Lindqvist, Predrag Spasojevic, Jeffrey Walling
ACM International Conference on Mobile Computing and Networking (**ACM MobiCom**), 2012
(32 out of 212 submissions, acceptance ratio: 15.1%)
BEST PAPER AWARD
20. "DMap: A Shared Hosting Scheme for Dynamic Identifier to Locator Mappings in the Global Internet"
Tam Vu, Akash Baid, Yanyong Zhang, Thu Nguyen, Junichiro Fukuyama, Richard Martin and Dipankar Raychaudhuri
IEEE International Conference on Distributed Computing Systems (**IEEE ICDCS**), 2012
(71 out of 515 submissions, acceptance ratio: 13.8%)
21. "Ask, Don't Search: A Social Help Engine for Online Social Network Mobile Users"
Tam Vu, Akash Baid
IEEE Sarnoff Symposium (**IEEE Sarnoff**), 2012
22. "Phantom: Physical Layer Cooperation for Location Privacy Protection"
Sangho Oh, Tam Vu, Marco Gruteser, Suman Banerjee
IEEE International Conference on Computer Communications (**IEEE INFOCOM**), 2012.
(278 out of 1547 submissions, acceptance ratio: 17.9%)
23. "Detecting Driver Phone Use Leveraging Car Speakers"
Jie Yang, Simon Sidhom, Gayathri Chandrasekaran, Tam Vu, Hongbo Liu, Nic Cec, Yingying Chen, Marco Gruteser, Rich Martin
ACM International Conference on Mobile Computing and Networking (**ACM MobiCom**), 2011
(29 out of 214 submissions, acceptance ratio: 13.6%)
BEST PAPER AWARD

24. "DDTW Algorithm for Vehicular Speed Tracking using Received Signal Strength from Mobile Phones"
Gayathri Chandrasekaran, Tam Vu, Marco Gruteser, Richard Martin, Alex Varshavsky, Jie Yang, Yingying Chen
IEEE International Conference on Pervasive Computing and Communications (**IEEE PerCom**), 2011
(32 out of 227 submissions, acceptance ratio: 14.1%)
25. "Vehicular Speed Estimation using Received Signal Strength from Mobile Phones"
Gayathri Chandrasekaran, Tam Vu, Marco Gruteser, Richard Martin, Alex Varshavsky, Jie Yang, Yingying Chen
ACM International Conference on Ubiquitous Computing (**ACM UbiComp**), 2010
(39 out of 202 submissions, acceptance ratio: 19.3%)

Journal Articles

26. "ParkSense: Automatic Parking Positioning by Leveraging In-Vehicle Magnetic Field Variation"
Phuc Nguyen, Hieu Nguyen, Dong Nguyen, Thang N. Dinh, Hung M. La, and Tam Vu
IEEE Access 2017 - IEEE Access Journal (**IEEE Access**), 2017
27. "Android User Privacy Preserving through Crowdsourcing"
Bahman Rashidi, Carol Fung, Anh Nguyen, Tam Vu, Elisa Bertino
IEEE Transactions on Information Forensics and Security (**IEEE TIFS**), 2017
28. "EIR: Edge-Aware Inter-Domain Routing Protocol for the Future Mobile Internet"
Shreyasee Mukherjee, Shravan Sriram, Tam Vu, Dipankar Raychaudhuri
Elsevier Computer Networks Journal (**Computer Networks**), 2017
29. "Transitivity Demolition and the Falls of Social Networks"
Hung Nguyen, Nam Nguyen, Tam Vu, Huan Hoang, Thang Dinh
IEEE Access Journal (**IEEE Access**), 2017.
30. "A Smart Shoe for Building a Real-Time 3D Map"
Luan V. Nguyen, Hung Manh La, Jesus Sanchez and Tam Vu
Elsevier Journal of Automation in Construction (**JAC**), 2016
31. "Android Fine-grained Permission Control System with Real-Time Expert Recommendations"
Bahman Rashidi, Carol Fung, and Tam Vu
Elsevier Pervasive and Mobile Computing (**PMC**), 2016
32. "What Am I Looking At? Low-Power Radio-Optical Beacons For In-View Recognition"
Ashwin Ashok, Chenren Xu, Tam Vu, Marco Gruteser, Rich Howard, Yanyong Zhang, Narayan Mandyam, Wenjia Yuan, Kristin Dana
IEEE Transaction on Mobile Computing (**IEEE TMC**), 2016
33. "A Internet of Things Framework for Smart Energy in Buildings: Designs, Prototype, and Experiments"
Jianli Pan, Raj Jain, Subharthi Paul, Tam Vu, Abusayeed Saifullah, Mo Sha
IEEE Internet of Things (IoT) Journal (**IEEE IoT**), 2015
34. "Capacitive Touch Communication: A Technique to Input Data Through Device's Touchscreens"
Tam Vu, Akash Baid, Marco Gruteser, Jeffrey Walling, Predrag Spasojevic, Richard Howard
IEEE Transaction on Mobile Computing (**IEEE TMC**), 2014
35. "Personal Touch-Identification Tokens"
Tam Vu, Marco Gruteser
IEEE Pervasive Computing Magazine (**IEEE Pervasive**), 2013
36. "Sensing Driver Phone Use with Acoustic Ranging Through Car Speakers"
Jie Yang, Simon Sidhom, Gayathri Chandrasekaran, Tam Vu, Hongbo Liu, Yingying Chen, Marco Gruteser, Rich Martin
IEEE Transaction on Mobile Computing (**IEEE TMC**), 2012

Refereed Workshops and Abstracts

37. *Through-body Capacitive Touch Communication*
Hoang Truong, Phuc Nguyen, Viet Nguyen, Richard Howard, Marco Gruteser, Tam Vu
ACM MobiCom S3 - Wireless of, by, and for the Students Workshop, 2017
38. *Photometry based Blood Oxygen Estimation through Smartphone Cameras*
Nam Bui, Anh Nguyen, Phuc Nguyen, Hoang Truong, Ashwin Ashok, Thang Dinh, Robin Deterding, Tam Vu
ACM MobiCom S3 - Wireless of, by, and for the Students Workshop, 2017
BEST PAPER AWARD
39. *Capacitive sensing 3D-printed Wristband for Enriched Hand Gesture Recognition*
Hoang Truong, Phuc Nguyen, Anh Nguyen, Nam Bui, Tam Vu **ACM WearSys** ACM workshop on Wearable Systems and Applications, 2017
40. *WikiSpiro: Non-contact Respiration Volume Monitoring during Sleep*
Phuc Nguyen, Shane Transue, Min-Hyung Choi, Tam Vu
ACM MobiCom S3 Wireless of the Students, by the Students, and for the Students Workshop, 2016
BEST PAPER AWARD
41. *LIBS: A Low-cost In-Ear Bioelectrical Sensing Solution for Healthcare Applications*
Anh Nguyen, Zohreh Raghebi, Farnoush Banaei-kashan, Ann C. Halbower, Tam Vu
ACM MobiCom S3 Wireless of the Students, by the Students, and for the Students Workshop, 2016
42. *In-ear Biosignal Recording System: A Wearable For Automatic Whole-night Sleep Staging*
Anh Nguyen, Raghda Alqurashi, Farnoush Banaei-kashani, Ann C. Halbower, Thang Dinh, Tam Vu
ACM WearSys - ACM workshop on Wearable Systems and Applications, 2016.
43. *Investigating Cost-effective RF-based Detection of Drones*
Phuc Nguyen, Mahesh Ravindranathan, Anh Nguyen, Richard Han, Tam Vu
ACM DroNet - Workshop on Micro Aerial Vehicle Networks, Systems, and Applications, 2016
44. *Supporting Wireless Connected Cities by Empowering Edge Networks*, Tam Vu
NSF-NeTS meeting- Invited 2016 - Looking beyond the Internet - Future Wireless Cities Workshop.
45. *Wearable Device Identification using Built-in Capacitive Signature*
Phuc Nguyen, Tam Vu
ACM WearSys - ACM workshop on Wearable Systems and Applications, 2015
46. *Community Detection in Multiplex Social Networks*
Hung T. Nguyen, Thang N. Dinh, Tam Vu
IEEE INFOCOM-WIDN - Workshop on Inter-Dependent Networks, 2015
47. *RecDroid: A Resource Access Control Portal and Recommendation Service for Smartphone Users*
Bahman Rashidi, Carol Fung, Tam Vu
ACM MobiCom - SPME - Workshop on Security and Privacy in Mobile Environments, 2014
48. *Comparing Alternative Approaches for Networking of Named Objects in the Future Internet*
Akash Baid, Tam Vu, Dipankar Raychaudhuri
IEEE INFOCOM - NOMEN -Workshop on Emerging Name-Oriented Networking, 2012

Poster and Demos

49. *Low-power Capacitive Sensing Wristband for Hand Gesture Recognition*
Hoang Truong, Phuc Nguyen, Anh Nguyen, Nam Bui, Tam Vu
ACM MobiCom S3 2017 - Demo Session
50. *Continuous and Fine-grained Respiration Volume Monitoring Using Continuous Wave Radar*
Phuc Nguyen, Xinyu Zhang, Ann C. Halbower, Tam Vu
ACM MobiCom 2015 - Poster session
51. *Mobile Device Identification by Leveraging Built-in Capacitive Signature*
Manh Huynh, Phuc Nguyen, Marco Gruteser, Tam Vu
ACM CCS 2015 - Poster session

52. *Demo: BiFocus - Using Radio-Optical Beacons for An Augmented Reality Search Application*
Ashwin Ashok, Chenren Xu, Tam Vu, Marco Gruteser, Richard Howard, Yanyong Zhang, Narayan Mandayam, Wenjia Yuan, Kristin Dana,
ACM MobiSys 2013 - Demo Session
53. *Demo: User Identification and Authentication with Capacitive Touch Communication*
Tam Vu, Akash Baid, Marco Gruteser, Jeffrey Walling, Predrag Spasojevic, Richard Howard
ACM MobiSys 2012 - Demo Session

PROFESSIONAL SERVICES AND ACTIVITIES

- **Selected Keynotes & Invited Talks:**

- Opening keynote at ACM SenSys - ENSys workshop 2018, “Earable Computers”
- Opening keynote ACM MobiHoc - Mobile Health 2016 workshop - “Pediatric Mobile Healthcare: Opportunities, Challenges, and Solutions”
- Keynote at The 7th ACM International Symposium on Information and Communication Technology, 2016 - “Mobile sensing and its applications in health care”
- Invited talk at WPA workshop in MobiSys 2017 - “Non-invasive Sleep Quality Monitoring with LIBS, an In-ear Sensing Systems”
- Invited talk at HotWireless workshop in MobiCom 2017 - “Drone Physical Characterization using RF Signatures”
- Invited talk at MIT Media Lab, Stanford Univ., Princeton Univ., Carnegie Mellon Univ., Univ. of Southern California, Dartmouth College, UMass Amherst, Univ. of California Irvine, 2017 - “Wearable and Wireless CPS for non-obtrusive sleep monitoring”

- **Chair - Conference Technical Sessions, Workshop, and Organization:**

Travel Chair, ACM SenSys 2018

Workshops Co-Chair, ACM MobiCom 2017, ACM MobiSys 2017

Publicity Chair, ACM IPSN 2017

Demo Co-Chair, ACM MobiCom 2016

Co-Chair, ACM WearSys 2016 - Workshop on Wearable Systems and Applications

Session Chair, ACM MobiSys 2015 - Understanding and Improving Mobile App Capabilities

Session Chair, Mobile health session, ACM WearSys 2015

Session Chair, System Modeling and Optimization session, MCSE 2015

- **Panelist :**

- National Science Foundation (SCH and SaTC), 2015, 2016, 2017, 2018

- **Technical Program Committee :**

ACM International Conference on Mobile Computing and Networking (MobiCom) 2019

ACM Conference on Embedded Networked Sensor Systems (SenSys), 2017, 2018, 2019

ACM Int. Conf. on Mobile Systems, Applications, and Services (MobiSys) 2015, 2017,2018, 2019

IEEE The International Conference on Information Processing in Sensor Networks(IPSN) 2017,2018

IEEE Int. Conference on Pervasive Computing and Communication (PerCom) 2017

International Conference on Distributed Computing in Sensor Systems (DCOSS) 2017, 2018

IEEE Vehicular Networking Conference (VNC), 2013, 2014, 2015, 2016, 2017

IEEE Conference on Computer Communications (INFOCOM) 2016

The Int. Conf. on Security in Communication Networks (SecureComm) 2013, 2014, 2015

The MobiSys workshop on Wearable Systems and Applications (WearSys) 2015

The Int. Conference on Modeling of Complex System and Environment (MCSE) 2015

IEEE Int. Conference on Pervasive Computing and Communication (PerCom) 2015

IEEE International Workshop on Security for Distributed Net. Tech (DISSECT) 2015

The Int. Conference on Mobile Systems and Pervasive Computing (MobiSPC) 2014, 2015
IEEE International Conference on Communications (ICC) 2013, 2014, 2015
IEEE Int. Conference on Distributed Computing in Sensor Systems (DCOSS) 2014
ACM Workshop on Mobility in the Evolving Internet Arch. (MobiArch) 2013, 2014
ACM Workshop on Wireless of Students, by Students, for Students (ACM S3), 2013

- **Reviewer Activities:**

- Journals Reviewer

- IEEE Transaction on Mobile Computing
 - IEEE Transactions on Human-Machine Systems;
 - IEEE Transactions on Dependable and Secure Computing;
 - IEEE Transactions on Control Systems Technology;
 - IEEE Transactions on Wireless Communications;
 - IEEE Transactions on Information Forensics & Security;
 - ACM Transactions on Cyber Physical Systems;
 - ACM/IEEE Transactions on Networking;
 - ACM Transactions on Information and System Security;
 - ACM Transactions on Sensor Networks;
 - ACM Computer Communication Review;
 - Communication of the ACM.
 - Computer Networks Journal
 - Ad-Hoc Networks Journal
 - Pervasive and Mobile Computing Journal
 - IEEE Pervasive Computing
 - IEEE Journal on Internet of Things

- Conferences Reviewer

- ACM UbiComp 2014, ACM MobiCom 2014, ACM MobiSys 2013, ACM MobiCom 2013, ACM UbiComp 2013, ACM/IEEE IPSN 2013, ACM HotMobile 2013, IEEE Percom 2013, NDSS 2012, ACM Mobisys 2012, ACM MobiCom 2012, IEEE TMC 2012, IEEE PerCom 2012. ACM Mobisys 2011, ACM MobiCom 2011, IEEE Infocom 2011, ICDCN 2011

- **University Services**

- University of Colorado Boulder, 2017 -present

- Member, Graduate Committee - Dept. of Computer Science, 2017 - Present
 - Founder and director of Mobile and Networked Systems Lab, 2017 - Present
 - Graduate Admission Committee, Dept. of Computer Science, 2017 - Present

- University of Colorado Denver, 2013 - 2017

- Steering Committee - University's Creative Research Collaborative Initiative, 2016 -2017
 - Chair, Graduate Committee - Dept. of Computer Science and Engineering, 2015 - 2017
 - Founder and director of Mobile and Networked Systems Lab, 2013 - 2017
 - Faculty Search Committee, Dept. of Computer Science and Engineering, 2014, 2015
 - Search Committee for System Admin, Dept. of Computer Science and Engineering, 2014
 - Graduate Admission Committee, Dept. of Computer Science and Engineering, 2014 - 2017

SCHOLARLY TALKS & PRESENTATIONS

- *PhO₂: Smartphone based Blood Oxygen Level Measurement Systems using NearIR and RED Wave-guided Light*, ACM SenSys, Netherlands, November 2017
- *Wearable and Wireless CPS for non-obtrusive sleep monitoring*, at Princeton University(04/2017), University of California Irvine(03/2017), Dartmouth College(02/2017), University of Massachusetts Amherst(02/2017), Rutgers University(04/2017), Stanford University(01/2017), Carnegie Mellon University(04/2017), MIT (09/2017), Google Brain Palo Alto (03/2018).

- *A Lightweight And Inexpensive In-ear Sensing System For Automatic Whole-night Sleep Stage Monitoring*, ACM SenSys, Stanford University, California, November 2016
- *Keynote - Pediatric Mobile Healthcare: Opportunities, Challenges, and Solutions*, ACM Mobile Health 2016 workshop, Germany, July 2016
- *The disappearance of mobile systems*, Invited Seminar, Dept. of Computer Science, University of Colorado, Boulder, CO, Nov. 2015
- *WASUP-Touch: Wearable Authentication Solution for Ubiquitous and Personal Touch-enabled Devices*, Invited Seminar, Dept. of Computer Science, VA Commonwealth University, Richmond, VA, Nov. 2015
- *Knock-Knock: Two-factor authentication in single step*, Invited Seminar, Dept. of Computer Science, Colorado State University, Fort Collin, CO, Oct. 2015
- *WiSpiro: Non-Contact and Continuous Vital Signal Monitoring Using Radio Signals*, Invited Seminar, College of Engineering, University of Colorado, Denver, CO, Oct. 2015
- *mSleepWatcher: Why didn't I sleep well?*, MCSE Conference, Da Nang, Vietnam, Jun. 2015
- *Wearable Device Identification using Built-in Capacitive Signature*, MobiSys-WearSys Workshop, Florence, Italy, May 2015
- *Detection of On-Road Vehicles Operating GPS Jammers*, Invited Seminar, Colorado School of Mines, Golden, CO, Nov. 2014
- *RecDroid: A Resource Access Permission Control Portal and Recommendation Service for Smartphone Users*, MobiCom-SPME workshop, Hawaii, US, Sep. 2014
- *One Ring To Rule Them All: A Single Tap Is All You Need For Authentication*, Invited Seminar, LockHeed Martin, Littleton, CO, May 2014
- *A single tap is all you need for authentication*, Invited Seminar, Dept. of Computer Science, Denver University, Denver CO, Feb 2014
- *One Ring To Rule Them All: A Single Tap Is All You Need For Authentication*, Invited Seminar, Dept. of Electrical, Computer, and Energy Engineering, Boulder, CO, Sep. 2013
- *Distinguishing Users with Capacitive Touch Communication*, WINLAB, Industrial Advisory Board Meeting, New Brunswick, NJ, Dec 2012
- *Replacing Your Password With a Finger Swipe*, Invited Seminar, Verizon Technology Innovation Center, Basking Ridge, NJ, Nov. 2012
- *Distinguishing Users with Capacitive Touch Communication*, Invited Seminar, Dept. of Computer Science and Engineering, Stevens Institute of Technology, Hoboken, NJ, October, 2012
- *"One Ring To Rule Them All": A Token-based Authentication Solution for Mobile Touchscreen-enabled Devices*, GigaOM Mobilize, The Mobile-First World, San Francisco, CA, September, 2012
- *Distinguishing Users with Capacitive Touch Communication*, Seminar, Dept. of Computer Science, Rutgers University, New Brunswick, New Jersey, September, 2012
- *Distinguishing Users with Capacitive Touch Communication*, ACM MobiCom Conference 2012, Istanbul, Turkey, August, 2012
- *DMap: A Shared Hosting Scheme for Dynamic Identifier to Locator Mappings in the Global Internet*, IEEE ICDCS 2012, Macau, Macau, June, 2012
- *Ask, Don't Search: A Social Help Engine for Online Social Network Mobile Users*, Sarnoff Symposium 2012, Newark, New Jersey, May, 2012.
- *EIR: Edge-Aware Inter-Domain Routing Protocol for the Future Mobile Internet*, Invited Seminar, WINLAB, Industrial Advisory Board Meeting, NJ, May 2012
- *Phantom: Physical Layer Cooperation for Location Privacy Protection*, INFOCOM 2012 Conference, Orlando, Florida, March, 2012
- *DMap: A Shared Hosting Scheme for Dynamic Identifier to Locator Mappings in the Global Internet*, WINLAB, Industrial Advisory Board Meeting, New Jersey, December 2011
- *ADHealthCheck: A diagnostic toolkit for Active Directory*, Microsoft Active Directory Group, Redmond, Washington, August 2011.

COURSES TAUGHT

- CSCI 7000: *Mobile, Wearable, Wireless Systems*, Fall 2017 , University of Colorado, Boulder; Developed new course (Power Point slides, Homework Assignments, Final Projects).
- CSCI 4287: *Embedded System Programming*, Spring 2017 , University of Colorado, Denver; Revised and updated the course (Power Point slides, Homework Assignments, Final Projects).
- CSCI 4211/5211: *Mobile Computing and Programming*, Fall 2016 , University of Colorado, Denver; Revised course material (Power Point slides, Homework Assignments, Final Projects).
- CSCI 4287: *Embedded System Programming*, Spring 2016 , University of Colorado, Denver; Revised and updated the course (Power Point slides, Homework Assignments, Final Projects).
- CSCI 5866/7866: *Advanced Mobile and Ubiquitous System*, Fall 2015 , University of Colorado, Denver; Developed new course (Power Point slides, Homework Assignments, Final Projects).
- CSCI 4287: *Embedded System Programming*, Spring 2015 , University of Colorado, Denver; Developed new course (Power Point slides, Projects, Exams, Weekly Assignments)
- CSCI 4211/5211: *Mobile Computing and Programming*, Fall 2014 , University of Colorado, Denver; Developed new course (Power Point slides, Homework Assignments, Final Projects).
- CSCI 4800/5800: *Mobile and Ubiquitous Systems*, Fall 2013 , University of Colorado, Denver; Developed new course (Power Point slides, Homework Assignments, Final Projects).
- CS 112: *Data Structure*, Fall 2009, Rutgers University - As Teaching Assistant who gives weekly recitation to 25+ students
- CS 110: *Introduction to Computers and their Applications*, Fall 2008, Spring 2009, Summer 2009, Rutgers University - As Teaching Assistant who gives weekly recitation to 25+ students
- ICT 2.2: *C programming language*, Fall 2007, Hanoi University of Technology, Vietnam; Developed new material (Power Point slides, Quizzes, Homework and Exams)
- ICT 3.2: *Introduction to Computer Networks*. Fall 2007, Hanoi University of Technology, Vietnam; Developed new material (Power Point slides, Quizzes, Homework and Exams)

STUDENT MENTORING AND SUPERVISION

Mobile and Networked System Laboratory, UC Boulder & Denver Fall 2013 - Present

- **Postdoc**

Dong Nguyen, Ph.D., 2014 - 2015, Currently a CEO of SaolaSoft Inc.

- **Ph.D. Students**

Phuc Nguyen - Fall 2014 - Present - **Outstanding Graduate Student Award 2016**

Anh Nguyen - Fall 2014 - Present

Tony Hoang Truong - Spring 2017 - Present

Nam Bui - Spring 2017 - Present

- **Undergraduate Students**

Jasmine Mai - Internship - Freshmen - 2017-present

Duy Pham - Internship - Senior - 2017-2018

Sean Kuhlman - **UCD Engineering Senior Design Competition Winner 2016 & Undergraduate Slider Medal Award Recipient 2016**

Cory Coellean - **UCD Engineering Senior Design Competition Winner 2016**

Raphael O'flynn - **UCD Engineering Senior Design Competition Winner 2016**

Michael Hunsinger - **UCD Engineering Senior Design Competition Winner 2016**

Rick Laoprasert - Undergrad from Duke University - Summer Internship - 2016

- **Past K-12 Student**

Changyuan Lin - Summer Volunteer - 7th Grader - 2015

Jasmine Mai - Summer Intern - 11th Grader - 2016

- **Thesis Committee Membership**

Muhammed Talo, Ph.D Dissertation Defense, Spring 2016

Lan Vu, Ph.D Dissertation Defense, Fall 2014

Robert W. Senser, Ph.D Dissertation Defense, Fall 2014

Natalia Duque, Master Thesis Defense, Fall 2014

Oleg Umanskiy, Ph.D Dissertation Defense, Spring 2015

Charles F. Laheist, Master Thesis Defense, Spring 2015

WINLAB, Rutgers University, NJ, USA

Summer 2010 - Fall 2012

- Gorkem Kar and Hai Nguyen, Ph.D. Students, Fall 2012, led to a publication at ACM CCS 2014
- Joshua Devasagayaraj, a senior undergraduate, Summer 2012, led to publications at ACM Mobicom 2012 and ACM MobiSys 2012.
- Simon Gao and Jazmin Garcia, junior undergraduate students, Fall 2011, led to a publication at ACM MobiCom 2012.
- Nicolae Cecan, a senior year undergraduate, Summer 2010, led to a publication at ACM Mobicom 2011.

PROFESSIONAL MEMBERSHIP

Member, Institute of Electrical and Electronics Engineers (IEEE)

Member, IEEE Communications Society

Member, IEEE Computer Society

Member, Association for Computing Machinery (ACM)

Member, ACM SIG on Mobility of Systems, Users, Data, and Computing (SIGMOBILE)

SELECTED PRESS COVERAGE

Denver Post: Playing Pokemon Go? Heres how to stay safe - July 2016

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