NIC LANE | RESUME

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BREIF BIO

I hold dual academic and industrial appointments as a Senior Lecturer (Associate Professor) at University College London (UCL), and a Principal Scientist at Nokia Bell Labs. At UCL I am part of the Digital Health Institute and UCL Interaction Center, while at the Bell Labs I lead DeepX – an embedded focused deep learning unit at the Cambridge location that is part of the broader Pervasive Sensing and Systems department. Before moving to England in January 2015, I spent four years as a Lead Researcher at Microsoft Research based in Beijing. There I was a member of the Mobile and Sensing Systems group (MASS) led by Feng Zhao. In March 2011, I received a Ph.D. from Dartmouth College under the supervision of Andrew T. Campbell and Tanzeem Choudhury. My dissertation pioneered community-guided techniques for learning models of human behavior that enable mobile systems to better cope with diverse user populations encountered in the real-world.

More broadly, my research interests revolving around the systems and modelling challenges that arise when computers collect and reason about people-centric sensor data. For the past two years, I have been primarily focused on: (1) developing high-precision deep learning models of human behavior and context, and (2) enabling state-of-the-art signal processing and modeling algorithms to efficiently execute on embedded-class hardware. At heart, I am an experimentalist who likes to build prototype sensing systems based on well-founded computational models. Results of my research have been published in top-tier conferences that focus on ubiquitous computing and mobile sensing research (e.g., AAAI, UbiComp, MobiCom, MobiSys, SenSys). This work has been recognized by the community with best paper awards (UbiComp '15 and '12, MobiCASE '12) and best paper nominations (UbiComp '11 and '14). My recent professional service and activities include: serving on the PC for leading venues in my field (e.g., WWW, CIKM, UbiComp, MobiSys, SenSys), in addition to acting as PC-chair of HotMobile 2017, MobiQuitous 2015, and MobiCASE 2014.

EDUCATION

2011   Ph.D., Computer Science, Dartmouth College – Hanover, NH, U.S.A
          Thesis: *"Community-guided Mobile Phone Sensing Systems"*
          Advisors: Andrew T. Campbell and Tanzeem Choudhury

2004   M.Eng., Computer Science, Cornell University – Ithaca, NY, U.S.A.

2002   B.Sc. (Hons) 1st Class, Finance and Computer Science, Waikato University – Hamilton, N.Z

AWARDS

2016   Best Paper – *WristSense '16*

2015   Best Paper – *UbiComp '15*

2014   Best Paper Nominee – *UbiComp '14*

2012   Best Paper – *UbiComp '12*
          Best Paper – *MobiCASE '12*

2011   Best Paper Nominee – *UbiComp '11*
          Best Paper – *PhoneSense '11*

EMPLOYMENT

February 2016 – *present*   Senior Lecturer at University College London
London, UK

January 2015 – *present*   Principal Scientist at Bell Labs
Cambridge, UK

September 2013 – December 2015   Lead Researcher at Microsoft Research
Beijing, China

March 2011 – August 2013   Researcher at Microsoft Research
Beijing, China

July 2009 – December 2009   Intern Researcher at Microsoft Research
Beijing, China and Redmond WA, U.S.A

June 2004 – October 2004   Intern Software Developer at Crown Holdings
Philadelphia PA, U.S.A

September 2003 – December 2003   Intern Software Developer at Autodesk
Waltham MA, U.S.A

June 2003 – September 2003   Intern Researcher at Xerox Research
Rochester NY, U.S.A

GRANTS

Funded Grants

December 2010   *"Research in the App-Store Era"*
Amazon AWS Education Research Grant
Co-PI, $6,000 USD

PUBLICATIONS

All my publications are available from my website (http://niclane.org) or my google scholar profile.
Currently my h-score is 34 and collectively my work has been cited more than 7,400 times.

A. Refereed Conference Papers

2016   **[C.44]**   Sourav Bhattacharya, Nicholas D. Lane, *"Sparsifying Deep Learning Layers for Constrained Resource Inference on Wearables"*, 14th ACM Conference on Embedded Networked Sensor Systems (*SenSys '16*), November 2016

[C.43] Petko Georgiev, Nicholas D. Lane, Kiran K. Rachuri, Cecilia Mascolo, *"LEO: Scheduling Sensor Inference Algorithms across Heterogeneous Mobile Processors and Network Resources",* 22nd Annual International Conference on Mobile Computing and Networking (*MobiCom '16*), October 2016

[C.42] Akhil Mathur, Nicholas D. Lane, and Fahim Kawsar. *"Engagement-Aware Computing: Modelling User Engagement with Mobile Contexts"*, 18th International Conference on Ubiquitous Computing (*UbiComp '16*), September 2016

[C.41] Biyi Fang, Nicholas D. Lane, Mi Zhang, Aidan Boran, Fahim Kawsar, *"BodyScan: A Wearable Device for Contact-less Radio-based Sensing of Body-related Activities"*, 14th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '16*), June 2016

[C.40] Nicholas D. Lane, Sourav Bhattacharya, Petko Georgiev, Claudio Forlivesi, Lei Jiao, Lorena Qendro, Fahim Kawsar, *"DeepX: A Software Accelerator for Low-Power Deep Learning Inference on Mobile Devices"*, 15th International Conference on Information Processing in Sensor Networks (*IPSN '16*), April 2016

[C.39] Biyi Fang, Nicholas D. Lane, Mi Zhang, Fahim Kawsar, *"HeadScan: A Wearable System for Radio-based Sensing of Head and Mouth-related Activities"*, 15th International Conference on Information Processing in Sensor Networks (*IPSN '16*), April 2016

2015 **[C.38]** Nicholas D. Lane, Petko Georgiev, Lorena Qendro, "*DeepEar: robust smartphone audio sensing in unconstrained acoustic environments using deep learning"*, 17th International Conference on Ubiquitous Computing (*UbiComp '15*), September 2015
[Best Paper Winner]

[C.37] Liwen Xu, Xiaohong Hao, Nicholas D. Lane, Xin Liu, Thomas Moscibroda, Feng Zhao, "*More with less: lowering user burden in mobile crowdsourcing through compressive sensing"*, 17th International Conference on Ubiquitous Computing (*UbiComp '15*), September 2015

[C.36] David Chu, Zengbin Zhang, Alec Wolman, Nicholas D. Lane, Feng Zhao, "*Prime: a framework for co-located multi-device apps"*, 17th International Conference on Ubiquitous Computing (*UbiComp '15*), September 2015

[C.35] Zhenyu Chen, Yiqiang Chen, Xingyu Gao, Shuangquan Wang, Lisha Hu, Chenggang Clarence Yan, Nicholas D. Lane, Chunyan Miao, "*Unobtrusive Sensing Incremental Social Contexts using Fuzzy Class Incremental Learning"*, IEEE International Conference on Data Mining (ICDM '15), November 2015

[C.34] Nicholas D. Lane, Petko Georgiev, Cecilia Mascolo, Ying Gao, "ZOE: A Cloud-less Dialog-enabled Continuous Sensing Wearable Exploiting Heterogeneous Computation", 13th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '15*) May 2015

[C.33] Liwen Xu, Xiaohong Hao, Nicholas D. Lane, Xin Liu, Thomas Moscibroda, "*Cost-Aware Compressive Sensing for Networked Sensing Systems*", 14th International Conference on Information Processing in Sensor Networks *(IPSN '15)*, April 2015

[C.32] Chieh-Jan Mike Liang , Börje Karlsson, Nicholas D. Lane, Feng Zhao, Junbei Zhang, Zheyi Pan, Zhao Li, Yong Yu, "*SIFT: Towards an Internet of Safe Things*", 14th International Conference on Information Processing in Sensor Networks *(IPSN '15)*, April 2015

2014 **[C.31]** Nicholas D. Lane, Li Pengyu, Lin Zhou, Feng Zhao, "*Connecting Personal-scale Sensing and Networked Community Behavior to Infer Human Activities*", 16th International Conference on Ubiquitous Computing (*UbiComp '14*), September 2014
[Best Paper Nominee]

[C.30] Petko Georgiev, Nicholas D. Lane, Kiran K. Rachuri, Cecilia Mascolo, "*DSP.Ear: Leveraging Co-Processor Support for Continuous Audio Sensing on Smartphones*", 12th ACM Conference on Embedded Network Sensor Systems (*SenSys '14*), November 2014

[C.29] Chieh-Jan Mike Liang, Nicholas D. Lane, Niels Brouwers, Li Zhang, Börje F. Karlsson, Hao Liu, Yan Liu, Jun Tang, Xiang Shan, Ranveer Chandra, Feng Zhao, *"Caiipa: Automated Large-scale Mobile App Testing through Contextual Fuzzing*", 20th Annual International Conference on Mobile Computing and Networking (*MobiCom '14*), September 2014

2013 **[C.28]** Nicholas D. Lane, Yohan Chon, Lin Zhou, Yongzhe Zhang, Fan Li, Dongwon Kim, Guanzhong Ding, Feng Zhao, Hojung Cha, "*Piggyback CrowdSensing (PCS): Energy Efficient Crowdsourcing of Mobile Sensor Data by Exploiting Smartphone App Opportunities*", 11[th]ACM Conference on Embedded Network Sensor Systems (*SenSys '13*), November 2013

[C.27] Yohan Chon, Nicholas D. Lane, Yunjong Kim, Feng Zhao, Hojung Cha. *"Understanding the Coverage and Scalability of Place-centric CrowdSensing*", 15th International Conference on Ubiquitous Computing (*UbiComp '13*), September 2013

[C.26] Ye Xu, Mu Lin, Hong Lu, Giuseppe Cardone, Nicholas D. Lane, Zhenyu Chen, Andrew Campbell, Tanzeem Choudhury. *"Preference, Context and Communities: A Multi-faceted Approach to Predicting Smartphone App Usage Patterns*", 17th International Symposium on Wearable Computers (*ISWC '13*), September 2013

[C.25] Zhenyu Chen, Mu Lin, Fanglin Chen, Nicholas D. Lane, Giuseppe Cardone, Rui Wang, Tianxing Li, Yiqiang Chen, Tanzeem Choudhury, Andrew T. Campbell. *"Unobtrusive Sleep Monitoring using Smartphones*", 7th International ICST Conference on Pervasive Computing Technologies for Healthcare (*Pervasive Health '13*), May 2013

[C.24] Chuang-Wen You, Nicholas D. Lane, Fanglin Chen, Rui Wang, Zhenyu Chen, Thomas J. Bao, Yuting Cheng, Mu Lin, Lorenzo Torresani, Andrew T. Campbell. *"CarSafe App: Alerting Drowsy and Distracted Drivers using Dual Cameras on Smartphones*", 11th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '13*), June 2013

[C.23] Robert LiKamWa, Yunxin Liu, Nicholas D. Lane, Lin Zhong. *"MoodScope: Building a Mood Sensor from Smartphone Usage Patterns"*, 11th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '13*), June 2013

2012 **[C.22]** Yohan Chon, Nicholas D. Lane, Fan Li, Hojung Cha, Feng Zhao. *"Automatically Characterizing Places with Opportunistic CrowdSensing using Smartphones"*, 14th International Conference on Ubiquitous Computing (*UbiComp '12*), September 2012
[Best Paper Winner]

[C.21] Xiaochao Yang, Chuang-Wen You, Hong Lu, Mu Lin, Nicholas D. Lane, Andrew T. Campbell. *"The Visage Face Interpretation Engine for Mobile Phone Applications"*, 4th International Conference on Mobile Computing Applications and Service (*MobiCASE '12*), October 2012
[Best Paper Winner]

[C.20] Mu Lin, Nicholas D. Lane, Mashfiqui Rabbi, Xiaochao Yang, Hong Lu, Giuseppe Cardone, Shahid Ali, Afsaneh Doryab, Ethan Berke, Andrew Campbell, Tanzeem Choudhury. *"BeWell+: Multi-dimensional Wellbeing Monitoring with Community-guided User Feedback and Energy Optimization"*, Wireless Health 2012, October 2012

[C.19] Saeed Abdullah, Nicholas D. Lane, Tanzeem Choudhury. *"Towards Population Scale Activity Recognition: A Scalable Framework for Handling Data Diversity"*. 26th Conference on Artificial Intelligence (*AAAI '12*), July 2012

2011 **[C.18]** David Chu, Nicholas D. Lane, Ted Tsung-Te Lai, Cong Pang, Xiangying Meng, Qing Guo, Fan Li, Feng Zhao, *"Balancing Energy, Latency and Accuracy for Mobile Sensor Data Classification"*, 9[th]ACM Conference on Embedded Network Sensor Systems (*SenSys '11*), November 2011

[C.17] Nicholas D. Lane, Ye Xu , Hong Lu , Shaohan Hu, Tanzeem Choudhury, Andrew T. Campbell. *"Enabling Large-scale Human Activity Inference on Smartphones using Community Similarity Networks (CSN)"*, 13th International Conference on Ubiquitous Computing (*UbiComp '11*), September 2011
[Best Paper Nominee]

[C.16] Nicholas D. Lane, Mashfiqui Mohammod, Mu Lin, Xiaochao Yang, Afsaneh Doryab, Hong Lu, Shahid Ali, Ethan Berke, Tanzeem Choudhury, Andrew Campbell. *"BeWell: A Smartphone Application to Monitor, Model and Promote Wellbeing"*, 5th International ICST Conference on Pervasive Computing Technologies for Healthcare (*Pervasive Health '11*), May 2011

2010 **[C.15]** Hong Lu, Jun Yang, Zhigang Liu, Nicholas D. Lane, Tanzeem Choudhury, Andrew T. Campbell, *"The Jigsaw Continuous Sensing Engine for Mobile Phone Applications"*, 8th ACM Conference on Embedded Networked Sensor Systems (*SenSys '10*), November 2010

[C.14] Nicholas D. Lane, Dimitrios Lymberopoulos, Feng Zhao, Andrew T. Campbell, *"Hapori: Context-based Local Search for Mobile Phones using Community Behavioral Modeling and Similarity",* 12th International Conference on Ubiquitous Computing (*UbiComp '10*), September 2010

[C.13] Daniel Peebles, Hong Lu, Nicholas D. Lane, Tanzeem Choudhury, Andrew T. Campbell. *"Community-Guided Learning: Exploiting Mobile Sensor Users to Model Human Behavior"*, 24th Conference on Artificial Intelligence (*AAAI '10*) July 2010

2009   **[C.12]** Hong Lu, Wei Pan, Nicholas D. Lane, Tanzeem Choudhury, Andrew T. Campbell, *"SoundSense: Scalable Sound Sensing for People-Centric Sensing Applications on Mobile Phones"*, 7th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '09*), June 2009

2008   **[C.11]** Emiliano Miluzzo, Nicholas D. Lane, Kristof Fodor, Ronald Peterson, Hong Lu, Mirco Musolesi, Shane B. Eisenman, Xiao Zheng, Andrew T. Campbell. *"Sensing Meets Mobile Social Networks: The Design, Implementation and Evaluation of the CenceMe Application"*, 7thACM Conference on Embedded Network Sensor Systems (*SenSys '08*), November 2008

[C.10] Emiliano Miluzzo, Nicholas D. Lane, Andrew T. Campbell, Reza Olfati-Saber. *"CaliBree: a Self-Calibration System for Mobile Sensor Networks"*, International Conference on Distributed Computing in Sensor Networks (*DCOSS '08*), June 2008

[C.09] Shane B. Eisenman, Nicholas D. Lane, Andrew T. Campbell. *"Techniques for Improving Opportunistic Sensor Networking Performance"*, International Conference on Distributed Computing in Sensor Networks (*DCOSS '08*), June 2008

[C.08] Nicholas D. Lane, Hong Lu, Shane B. Eiseman, Andrew T. Campbell. *"Cooperative Techniques Supporting Sensor-based People-centric Inferencing"*, 6th International Conference on Pervasive Computing (*Pervasive '08*), May 2008

2007   **[C.07]** Emiliano Miluzzo, Nicholas D. Lane, Shane B. Eisenman, Andrew T. Campbell. *"CenceMe - Injecting Sensing Presence into Social Networking Applications (Invited Paper)"*, 2nd European Conference on Smart Sensing and Context (*EuroSSC '07*), October 2007

[C.06] Shane B. Eisenman, Emiliano Miluzzo, Nicholas D. Lane, Ronald A. Peterson, Gahng-Seop Ahn, Andrew T. Campbell. *"The BikeNet Mobile Sensing System for Cyclist Experience Mapping"*, 6th ACM Conference on Embedded Network Sensor Systems (*SenSys '07*), November 2007

2006   **[C.05]** Andrew T. Campbell, Shane B. Eisenman, Nicholas D. Lane, Emiliano Miluzzo, Ronald Peterson. *"People-Centric Urban Sensing (Invited Paper)",* 2nd ACM/IEEE Annual International Wireless Internet Conference (*WICON '06*), August 2006

2003 **[C.04]** Masood Masoodian, Nicholas D. Lane. *"An Empirical Study of Textual and Graphical Travel Itinerary Visualization using Mobile Phones",* 4th Australasian User Interface Conference (*AUIC '03*), February 2003

2002 **[C.03]** Masood Masoodian, Nicholas D. Lane. *"MATI: A System for Accessing Travel Itinerary Information using Mobile Phones",* 16th British HCI Group Annual Conference, September 2002.

2001 **[C.02]** Masood Masoodian, Nicholas D. Lane. *"Access to Personal Travel Itinerary Information Using Mobile Phones",* 13th Annual Conference of the Computer-Human Interaction Special Interest Group of the Ergonomics Society of Australia (*OZCHI '01*) November 2001.

 [C.01] Masood Masoodian, Nicholas D. Lane. *"Mobile Access to Travel Itinerary Information",* 9th International Conference on Human-Computer Interaction, August 2001

B. Refereed Workshop Papers

2016 **[W.16]** Sourav Bhattacharya, Nicholas D Lane. *"From Smart to Deep: Robust Activity Recognition on Smartwatches using Deep Learning",* IEEE WristSense 2016: Workshop on Sensing Systems and Applications Using Wrist Worn Smart Devices (WristSense '16), March 2016 **[Best Paper Winner]**

2015 **[W.15]** Nicholas D Lane, Sourav Bhattacharya, Petko Georgiev, Claudio Forlivesi, Fahim Kawsar. "*An Early Resource Characterization of Deep Learning on Wearables, Smartphones and Internet-of-Things Devices",* 2015 International Workshop on Internet of Things towards Applications (*IoT-App '15*), November 2015

 [W.14] Nicholas D. Lane and Petko Georgiev. "*Can Deep Learning Revolutionize Mobile Sensing?",*16th Workshop on Mobile Computing Systems and Applications (*HotMobile '15*), February 2015

2013 **[W.13]** Stephen Voida, Tanzeem Choudhury, Geri Gay, Mark Matthews, Phil Adams, Mashfiqui Rabbi, JP Pollak, Mengxi (Chrissie) Chi, Matthew Green, Hong Lu, Nicholas D. Lane, Mu Lin, Andrew T. Campbell. *"Personal Informatics Can Be Stressful: Collecting, Reflecting, and Embedding Stress Data in Personal Informatics",* Personal Informatics in the Wild: Hacking Habits for Health & Happiness, April 2013

2012 **[W.12]** Nicholas D. Lane, Junyuan Xie, Thomas Moscibroda, Feng Zhao. *"On the Feasibility of User De-Anonymization from Shared Mobile Sensor Data",* 3rd International Workshop on Sensing Applications on Mobile Phones (*PhoneSense '12*), November 2012

2011 **[W.11]** Robert LiKamWa, Yunxin Liu, Nicholas D. Lane, Lin Zhong. *"Can Your Smartphone Infer Your Mood",* 2nd International Workshop on Sensing Applications on Mobile Phones (*PhoneSense '11*), November 2011
[Best Paper Winner]

[W.10] Emiliano Miluzzo, Michela Papandrea, Nicholas D. Lane, Andy M. Sarrovo, Silvia Giordano, Andrew T. Campbell. *"Tapping into the Vibe of the City Using VibN"*, 1st International Symposium on Social and Community Intelligence (*SCI '11*), September 2011

2010 **[W.09]** Emiliano Miluzzo, Michela Papandrea, Nicholas D. Lane, Hong Lu, Andrew T. Campbell, *"Pocket, Bag, Hand, etc.- Automatically Detecting Phone Context through Discovery"*. 1st International Workshop on Sensing Applications on Mobile Phones (*PhoneSense '10*), November 2010

[W.08] Emiliano Miluzzo, Nicholas D. Lane, Hong Lu, Andrew T. Campbell, *"Research in the App Store Era: Experiences from the CenceMe App Deployment on the iPhone".* 1st International Workshop Research in the Large: Using App Stores, Markets, and other Wide Distribution Channels in UbiComp Research, September 2010

2008 **[W.07]** Emiliano Miluzzo, James M. H. Oakley, Hong Lu, Nicholas D. Lane, Ronald A. Peterson, Andrew T. Campbell. *"Evaluating the iPhone as a Mobile Platform for People-Centric Sensing Applications"*, International Workshop on Urban, Community, and Social Applications of Networked Sensing Systems (*UrbanSense '08*). November 2008

[W.06] Mirco Musolesi, Emiliano Miluzzo, Nicholas D. Lane, Shane B. Eisenman, Tanzeem Choudhury, Andrew T. Campbell. *"The Second Life of a Sensor: Integrating Real-world Experience in Virtual Worlds using Mobile Phones"*, 5th Workshop on Embedded Networked Sensors (*HotEmNets '08*), June 2008

[W.05] Hong Lu, Nicholas D. Lane, Shane B. Eisenman, Andrew T. Campbell. *"Bubble-Sensing: A New Paradigm for Binding a Sensing Task to the Physical World using Mobile Phones"*, International Workshop on Mobile Devices and Urban Sensing (*MODUS '08*), April 2008

[W.04] Nicholas D. Lane, Shane B. Eisenman, Mirco Musolesi, Emiliano Miluzzo, Andrew T. Campbell. *"Urban Sensing Systems: Opportunistic or Participatory?"*, 9th Workshop on Mobile Computing Systems and Applications (*HotMobile '08*), February 2008

2007 **[W.03]** Nicholas D. Lane, Hong Lu, Andrew T. Campbell. *"Ambient Beacon Localization: Using Sensed Characteristics of the Physical World to Localize Mobile Sensors"*, 4th IEEE Workshop on Embedded Networked Sensors (*EmNets '07*), June, 2007

2006 **[W.02]** Shane B. Eisenman, Nicholas D. Lane, Emiliano Miluzzo, Ronald A. Peterson, Gahng-Seop Ahn, and Andrew T. Campbell, *"MetroSense Project: People-Centric Sensing at Scale".* 1st Workshop on World-Sensor-Web: Mobile Device Centric Sensory Networks and Applications (*WSW '06*), October 2006

[W.01] Nicholas D. Lane, Andrew T. Campbell, *"The Influence of Microprocessor Instructions on the Energy Consumption of Wireless Sensor Networks"*, 3rd IEEE Workshop on Embedded Networked Sensors (*EmNets '06*), May 2006

C. Refereed Journal and Magazine Articles

2015 **[J.09]** Ranveer Chandra, Börje F Karlsson, Nicholas D. Lane, Chieh-Jan Mike Liang, Suman Nath, Jitu Padhye, Lenin Ravindranath, Feng Zhao. *"How to SMASH the next billion mobile app bugs?",* ACM SIGMOBILE Mobile Computing and Communications Review (GetMobile), Volume 18 Issue 5. May 2015.

2014 **[J.08]** Nicholas D. Lane, Mu Lin, Mashfiqui Rabbi, Xiaochao Yang, Hong Lu, Giuseppe Cardone, Shahid Ali, Afsaneh Doryab, Ethan Berke, Andrew Campbell, Tanzeem Choudhury. *"BeWell: Sensing Sleep, Physical Activities and Social Interactions to Promote Wellbeing",* ACM/Springer Journal of Mobile Networks and Applications (MONET), January 2014: 1-15.

2013 **[J.07]** Nicholas D. Lane, Ye Xu, Hong Lu, Shaohan Hu, Tanzeem Choudhury, Andrew T. Campbell, Feng Zhao. *"Community Similarity Networks",* ACM/Springer Journal of Personal and Ubiquitous Computing (PUC), Special Issue of Cross-Community Mining, May 2013

2012 **[J.06]** Nicholas D. Lane. *"Community-Aware Smartphone Sensing Systems"* Internet Computing IEEE 16 (3), 60-64, 2012

2011 **[J.05]** Nicholas D. Lane, Ye Xu, Hong Lu, Shane Eisenman, Tanzeem Choudhury, Andrew Campbell. *"Cooperative Communities (CoCo): Exploiting Social Networks for Large-scale Modeling of Human Behavior",* IEEE Pervasive Computing, Special Issue on Large-Scale Opportunistic Sensing, Volume 10 Issue 4, October, 2011

2010 **[J.04]** Nicholas D. Lane, Emiliano Miluzzo, Hong Lu, Daniel Peebles, Tanzeem Choudhury, Andrew T. Campbell. *"Survey of Mobile Phone Sensing",* IEEE Communications Magazine, September 2010

   [J.03] Hong Lu, Nicholas D. Lane, Shane B. Eisenman, Andrew T. Campbell. *"Bubble-Sensing: Binding Sensing Tasks to the Physical World",* Journal of Pervasive and Mobile Computing (PMC), 6 (1), 58-71, 2010

2009 **[J.02]** Shane Eisenman, Emiliano Miluzzo, Nicholas D. Lane, Ronald Peterson, Gahng Seop Ahn, Andrew T. Campbell. *"BikeNet: A Mobile Sensing System for Cyclist Experience Mapping",* ACM Transactions on Sensor Networks (TOSN), 6 (1), 2009

2008 **[J.01]** Andrew T. Campbell, Shane B. Eisenman, Nicholas D. Lane, Emiliano Miluzzo, Ronald A. Peterson, Hong Lu, Xiao Zheng, Mirco Musolesi, Kristof Fodor, Gahng-Seop Ahn. *"People Power - The Rise of People-Centric Sensing",* IEEE Internet Computing, Special Issue on Mesh Networks, IEEE 12 (4), 12-21, 2008

D. Refereed Posters

2016 **[P.06]** Valentin Radu, Nicholas D. Lane, Sourav Bhattacharya, Cecilia Mascolo, Mahesh K. Marina and Fahim Kawsar. *"Towards Multimodal Deep Learning for Activity Recognition on Mobile Devices"*, 18th International Joint Conference on Pervasive and Ubiquitous Computing (*UbiComp '16*) , September 2016.

       [P.05] Biyi Fang, Nicholas D. Lane, Mi Zhang, Aidan Boran and Fahim Kawsar. *"Towards Radio-based Sensing on Wearables"*, 14th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '16*), July 2016.

       [P.04] Biyi Fang, Nicholas D. Lane, Mi Zhang and Fahim Kawsar. *"Towards Radio-based Activity Sensing on Wearables"*, 17th Workshop on Mobile Computing Systems and Applications (*HotMobile '16*), 23-24 February, 2016.

2014 **[P.03]** Zhenyu Chen, Yiqiang Chen, Lisha Hu, Shuangquan Wang, Xinlong Jiang, Xiaojuan Ma, Nicholas Lane, Andrew Campbell, *"ContextSense: Unobtrusive Discovery of Incremental Social Context using Dynamic Bluetooth Data".* 16th International Conference on Ubiquitous Computing (*UbiComp '14*), September 2014

2012 **[P.02]** Chuang-Wen You, Martha Montes-de-Oca, Thomas J. Bao, Nicholas D. Lane, Giuseppe Cardone, Lorenzo Torresani, and Andrew T. Campbell, *"CarSafe: A Driver Safety App that Detects Dangerous Driving Behavior using Dual-Cameras on Smartphones".* 14th International Conference on Ubiquitous Computing (*UbiComp '12*), September 2012

2006 **[P.01]** Emiliano Miluzzo, Nicholas D. Lane, and Andrew T. Campbell. *"Virtual Sensing Range (poster abstract)"*. 6th ACM Conference on Embedded Network Sensor Systems (*SenSys '06*), November 2006

E. Refereed Videos

2013 **[V.02]** Chuang-Wen You, Nicholas D. Lane,Fanglin Chen, Rui Wang, Zhenyu Chen, Thomas J. Bao, Yuting Cheng, Mu Lin, Lorenzo Torresani, Andrew T. Campbell. *"CarSafe App: Alerting Drowsy and Distracted Drivers using Dual Cameras on Smartphones"*, 11th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '13*), June 2013

       [V.01] Robert LiKamWa, Yunxin Liu, Nicholas D. Lane, Lin Zhong. *"MoodScope: Building a Mood Sensor from Smartphone Usage Patterns"*, 11th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '13*), June 2013

F. Refereed Demos

2016 **[D.07]** Nicholas D. Lane, Sourav Bhattacharya, Petko Georgiev, Claudio Forlivesi, and Fahim Kawsar, *"Accelerated Deep Learning Inference for Embedded and Wearable Devices using DeepX"*, 14th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '16*), July 2016.

[D.06] Nicholas D. Lane, Sourav Bhattacharya, Petko Georgiev, Claudio Forlivesi, and Fahim Kawsar, *"DeepX: A Software Accelerator for Embedded Deep Learning"*, 15th International Conference on Information Processing in Sensor Networks (*IPSN '16*), April 2016.

[D.05] Nicholas D. Lane, Sourav Bhattacharya, Petko Georgiev, Claudio Forlivesi and Fahim Kawsar, *"DeepX: A Software Accelerator for Squeezing Deep Learning onto Wearables, Phones and Things"*, 17th Workshop on Mobile Computing Systems and Applications (*HotMobile '16*), February, 2016.

2012 **[D.04]** Chuang-Wen You, Martha Montes-de-Oca, Thomas J. Bao, Nicholas D. Lane, Giuseppe Cardone, Lorenzo Torresani, and Andrew T. Campbell, *"CarSafe Demo: Supporting Driver Safety using Dual-cameras on Smartphones"*. 14th International Conference on Ubiquitous Computing (*UbiComp '12*), September 2012.

2008 **[D.03]** Andrew T. Campbell, Shane B. Eisenman, Kristóf Fodor, Nicholas D. Lane, Hong Lu, Emiliano Miluzzo, Mirco Musolesi, Ronald A. Peterson and Xiao Zheng, *"Transforming the Social Networking Experience with Sensing Presence from Mobile Phones (Demo Abstract),"* 7th ACM Conference on Embedded Network Sensor Systems (*SenSys '08*), November 2008.

[D.02] Andrew T. Campbell, Shane B. Eisenman, Kristóf Fodor, Nicholas D. Lane, Hong Lu, Emiliano Miluzzo, Mirco Musolesi, Ronald A. Peterson, and Xiao Zheng, *"CenceMe: Injecting Sensing Presence into Social Network Applications using Mobile Phones (Demo Abstract)"*, 9th ACM International Symposium on Mobile Ad Hoc Networking and Computing (*MobiHoc '08*), May 2008.

[D.01] Andrew T. Campbell, Shane B. Eisenman, Kristof Fodor, Nicholas D. Lane, Hong Lu, Emiliano Miluzzo, Mirco Musolesi, Ronald A. Peterson, Xiao Zheng. *"CenceMe: Injecting Sensing Presence into Social Network Applications using Mobile Phones (Demo Abstract)"* 9th Workshop on Mobile Computing Systems and Applications (*HotMobile '08*), February 2008.

G. Theses

2011 **[H.01]** Nicholas D. Lane, *"Community-guided Mobile Phone Sensing Systems"* Ph.D. thesis, Dartmouth College, 2011.

PATENTS

2012 **[P.08]** Nicholas D. Lane, Tanzeem Choudhury, Andrew T. Campbell, *"Exploiting Social Networks for Large-Scale Human Behavior Modeling"*, U.S Patent Pending.

[P.07] Feng Zhao, Niels Brouwers, Nicholas D. Lane, Mike Chieh-Jan Liang, Ranveer Chandra *"Closed-loop Mobile App Testing and Profiling Analysis Platform"*, U.S Patent Pending.

[P.06] Emmanouil Koukoumidis, Brian Beckman, Nicholas D. Lane, Arjmand Samuel *"Crowdsourced Media Annotation and Rating System"*, U.S Patent Pending.

[P.05] David Chu, Jaebaek Seo, Nicholas D. Lane, Alec Wolman, Thomas Moscibroda, *"Mobile Computing Device Application Sharing"*, U.S Patent Pending.

2011 **[P.04]** David Chu, Nicholas D. Lane, Jing Zhao, Feng Zhao*, "Automated Classification Pipeline Tuning under Mobile System Resource Constraints"*, U.S. Provisional Patent 329253.01 / MS1-4955US

2010 **[P.03]** Nicholas D. Lane, Dimitrios Lymberopoulos, Feng Zhao, *"Community Model Based Point of Interest Local Search"*, U.S. Provisional Patent 329254.01 / MS1-4956US

2007 **[P.02]** Emiliano Miluzzo, Nicholas D. Lane, Shane Eisenman, Andrew T. Campbell, *"System and Method for Injecting Sensed Presence into Social Networking Applications"*, U.S. Provisional Patent Application 60/976,371

2002 **[P.01]** Nicholas D. Lane, *"Communications software and method"*, N.Z. Provisional Patent Application 519017, 17th May 2002.

STUDENT ADVISING AND MENTORSHIP

A. External PhD. Advisor

since 2015 – Biyi Fang (Michigan State University)

since 2014 – Petko Georgiev (University of Cambridge)

B. PhD. Interns

2016 – Petar Veličković (University of Cambridge)

2013 – Hao Liu (Tsinghua University)
    – Yuichi Hattori (Kyushu Institute of Technology)

2012 – Niels Brouwers (TU Delft)
    – Yohan Chon (Yonsei University)

2011 – Robert LiKamWa (Rice University)

C. Masters Interns

2015 – Lorena Qendro (University of Bologna, Italy)

2014 – Matt Staib (Stanford University)

2013 – Xin Zhao (University of Science and Technology of China)

2011 – Jaebaek Seo (Korea Advanced Institute of Science and Technology)

D. Undergraduate Interns

2016 – Tianlin Zhang (University of Cambridge)

2014 – Li Pengyu (Beijing University of Post and Telecommunications)
    – Jiancheng Li (Beihang University)

2013/14 – Xiang Shan (Harbin Institute of Technology)

2013 – Zhaoming Wu (Tsinghua University)
    – Hang Wu (Tsinghua University)

2012/13 – Junyuan Xie (University of Science and Technology of China)
    – Yongzhe Zhang (University of Science and Technology of China)

2011 – Zhou Lin (Shanghai Jiaotong University)
    – Xiangying Meng (Peking Univeristy)

TEACHING EXPERIENCE

Spring 2015	*"Mobile and Sensor Systems"* Cambridge University, Computer Science Department Guest Lecturer
Summer 2013	*"Smartphone Sensing: A Game Changer for Behavioral Science"* Summer Institute in Social and Personality Psychology – UC Davis Tutorial Co-Organizer and Lecturer
September 2011	*"Building and Deploying Mobile Systems for Activity Recognition"* UbiComp 2011 – Beijing, China Tutorial Co-Organizer and Lecturer

Spring 2010	*"Computer Networks"* Dartmouth College, Computer Science Department Substitute Lecturer
Spring 2007	*"Computer Networks"* Dartmouth College, Computer Science Department Teaching Assistant
Spring 2006	*"Computer Networks"* Dartmouth College, Computer Science Department Teaching Assistant
Fall 2005	*"Introduction to Computer Science"* Dartmouth College, Computer Science Department Teaching Assistant

COMMUNITY ACTIVITIES AND SERVICE

Program Committee Chair	HotMobile '17 **CPSCom '16 MobiQuitous '15 MobiCASE '14**	(conferences highlighted in **bold**)

Track Program Committee Chair	**WWW '17 – Ubiquitous and Mobile Computing Track** **DCOSS '15 – Mobile Sensing Track**

Program Committee Member	**MobiSys '17** **INFOCOM '17** **PerCom '17** **MobiSys '16** **UbiComp '16** **SenSys '16** **INFOCOM '16** **WWW '16 – Mobility Track** HotMobile '16 **PerCom '16** **ICWE '16** WristSense '16 **MobiQuitous '16** **MobiCase '16** **ICWSM '15** **SenSys '15** **UbiComp '15**

Program Committee
Member *(continued)*

PerCom '15	(conferences highlighted in **bold**)

MobiSys '15 – External Review Committee
SECON '15 – Group Leader
WristSense '15
WoWMoM '15
MobiCase '15
MCSS '15
WPA-15
FutureMobileUI15
UIC '15 – Personalization and Social Aspects track
HotPlanet '15
PURBA '15
CIKM '14 – *Information Retrieval Track*
MM '14 – *Big and Broad Multimedia Track*
UbiComp '14
HotMobile '14
MobiQuitous '14
WoWMoM '14
PerCom '14 – *Work in Progress (WIP) Track*
MDM '14
MCSS '14
RTCSA '14 – *System Design Practice & Emerging Applications Track*
MMSYS '14 – *Mobile Multimedia Sensing Track*
DCOSS '14 – *Social Network & CrowdSensing Track*
Urb-IoT '14
MobiSys '13
UbiComp '13
SenSys '13
MobiCASE '13
RTSS '13
Pervasive Health '13
HotPlanet '13
DCOSS '13 – *Social Networks & Crowdsensing Track*
SeNAmI '13
SICE '13 – *Smart Sensing Systems Track*
PerCom '12 – *Work in Progress (WIP) Track*
Pervasive '12
CONET '12
SeNAmI '12
ISMIS '12
LBSN '12
UrbComp '12

Program Committee Member *(continued)*	Nokia Data Challenge (2012) PhoneSense '11 PeMA '11 S3 '10	(conferences highlighted in **bold**)
Demo Chair	*IPSN '17* *MobiSys '13* *PerCom '15*	
Workshop Chair	*MobiSys '16*	
Publicity Chair	*UbiComp '13*	
Web Chair	*IPSN '12*	
Sponsorship Chair	*HotMobile '15*	
Doctoral Symposium Chair	*SenSys '15* *UbiComp '15*	
Editorial Board Member	ACM SIGMOBILE Mobile Computing and Communications Review, "GetMobile" http://www.sigmobile.org/pubs/getmobile/ IEEE Pervasive Computing Magazine https://www.computer.org/pervasive-computing/	
Book Advisory Board Member	IDG Book – *"Tools for Mobile Multimedia Programming and Development"*	
PhD. Committee Member	Thor Siiger Prentow (Aarhus University, 2015) Sourav Bhattacharya (University of Helsinki, 2014)	

Workshop Co-Organizer

- 6th International Workshop on Mobile Cloud Computing and Services (MCS 2015)
  (co-located MobiCom '15)

- 2nd ACM Workshop on Mobile Systems for Computational Social Science
  (co-located Ubicomp '13)
- 3rd International Workshop on Mobile Sensing 2013
  (co-located IPSN '13)

- 2nd International Workshop on Mobile Sensing 2012
  (co-located IPSN '12)

Workshop Co-Organizer (continued)

- 1st International Workshop on Mobile Sensing 2011
  (co-located Ubicomp '11)

SELECTED PRESS COVERAGE

- New Scientist, August 2015 – "Eavesdropping app will turn your smartphone into a virtual PA"
- MIT Technology Review, February 2015 – "Deep Learning Squeezed Onto a Phone"
- Jimmy Kimmel Live, July 2013 – "Moodscope Phone Can Detect Your Emotions"
- The Register, June 2013 – "Microsoft's MoodScope app predicts smartphone users' feelings"
- The Economist, June 2013 – "Teaching old microphones new tricks"
- Daily Technews, December 2012 – *"Smartphone App Alerts Drowsy Drivers"*
- Wired, October 2012 – *"App Crams Driver Aids Into Android Phone"*
- New Scientist, September 2012 – *"Lane-keeping app makes any car smarter"*
- CBS's Smartplanet, September 2012— *"A simple app makes your car smarter"*
- New York Times, January 2012 – *"The Little Voice in Your Head"*
- Engadget, November 2010 – "Nokia toys with context-aware smartphone settings switch, Jigsaw provides better context for apps like this"
- New Scientist, November 2010 – *"Smartphone app monitors your every move"*
- MIT Technology Review, June 2009 – *"Cell Phones That Listen and Learn"*

SELECTED TALKS

2016 **[T.50]** *"Squeezing Deep Learning onto Wearables, Phones and Things"*, ARM Research Summit. Cambridge, UK – September 15th 2016

[T.49] *"DXTK: Exploring Deep Learning on Mobile and Embedded Platforms with the DeepX Toolkit"*, 3rd International Workshop on Physical Analytics. Singapore – June 26th 2016

[T.48] *"Deep Learning for Embedded Devices: The Next Step in Privacy Preserving High-Precision Mobile Mental Health Tools"*, Digital Pragmatism, Center for Translational Informatics, King's College London. London, UK – June 7th 2016

[T.47] *"Squeezing Deep Learning onto Wearables, Phones and Things"*, EECS Distinguished Lecturer Seminar Series, Queen Mary University of London. London, UK – May 18th 2016

[T.46] *"DeepX: A Software Accelerator for Low-Power Deep Learning Inference on Mobile Devices"*, 15th International Conference on Information Processing in Sensor Networks (*IPSN '16*). Vienna, Austria – April 12th 2016

2015   **[T.45]**   *"An Early Resource Characterization of Deep Learning on Wearables, Smartphones and Internet-of-Things Devices",* 2015 International Workshop on Internet of Things towards Applications (*IoT-App '15*). Seoul, South Korea – November 1st 2015

         [T.44]   *"Squeezing Deep Learning onto Wearables and Phones",* Deep Learning Summit. London, UK – September 25th 2015

         [T.43]   *"DeepEar: Robust Smartphone Audio Sensing in Unconstrained Acoustic Environments using Deep Learning?",* 17th International Conference on Ubiquitous Computing (*UbiComp '15*). Osaka, Japan – September 9th 2015

         [T.42]   *"The Next Big Hurdle for Mobile Cyber-physical Systems",* University of Oxford, CS Department. Oxford, UK – June 8th 2015

         [T.41]   *"ZOE: A Cloud-less Dialog-enabled Continuous Sensing Wearable Exploiting Heterogeneous Computation",* 13th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '15*). Florence, Italy – May 20th 2015

         [T.40]   *"Can Deep Learning Revolutionize Mobile Sensing?",* 16th Workshop on Mobile Computing Systems and Applications (HotMobile '15). Santa Fe, NM, USA – February 13th 2015

2014   **[T.39]**   *"Population-scale Networked Mobile Sensing Systems ",* University of Birmingham, CS Department. Birmingham, UK – October 6th 2014

         [T.38]   *"Connecting Personal-scale Sensing and Networked Community Behavior to Infer Human Activities",* 16th International Conference on Ubiquitous Computing (*UbiComp '14*). Seattle, WA, USA – September 16th 2014

         [T.37]   *"Population-scale Networked Mobile Sensing Systems"* Intel China Research Center. Beijing, China – July 30th 2014

         [T.36]   *"Population-scale Networked Mobile Sensing Systems",* Imperial College – EE Department. London, England – May 16th 2014

         [T.35]   *"Smartphones, Crowds, and the Cloud: Population Guided Sensing Systems"* Mobile Sensing, Mining and Visualization for Human Behavior Inference. Tainan, Taiwan – May 13th 2014

         [T.34]   *"How the Modern Smartphone became the Gateway Drug of the Mobile Sensing Revolution",* National Chiao Tung University. Hsinchu City, Taiwan – May 12th 2014

         [T.33]   *"Enabling Population-scale Sensing Systems with Dynamic Inference Pipelines and Community Similarity Networks",* Imperial College – CS Department. London, England – March 18th 2014

         [T.32]   *"Enabling Population-scale Sensing Systems with Dynamic Inference Pipelines and Community Similarity Networks",* ETH Zurich. Zurich, Switzerland – March 18th 2014

2013 **[T.31]** *"Smartphones, Crowds and the Cloud: Population Guided Sensing Systems"*
University of Cambridge. Cambridge, England – November 15th 2013

[T.30] *"Piggyback CrowdSensing (PCS): Energy Efficient Crowdsourcing of Mobile Sensor Data by Exploiting Smartphone App Opportunities",* 11th ACM Conference on Embedded Network Sensor Systems (Sensys '13). Rome, Italy – November 12th 2013

[T.29] *"Preference, Context and Communities: A Multi-faceted Approach to Predicting Smartphone App Usage Patterns",* 17th International Symposium on Wearable Computers (ISWC '13). Zurich, Switzerland – September 11th 2013

[T.28] *"Smartphones, Crowds and the Cloud: Population Guided Sensing Systems"*
5th ACM International Workshop on Hot Topics in Planet-Scale Measurement (HotPlanet). Hong Kong, China – August 16th 2013

[T.27] *"Towards Symbiotic CrowdSensing Systems"*
Intel – NTU Connected Context Computing Center
Taipei, Taiwan – June 24th 2013

[T.26] *"Smartphones, Crowds and the Cloud: Population Guided Sensing Systems"*
University of California – Los Angeles. Los Angeles, CA, USA – April 10th 2013

2012 **[T.25]** *"On the Feasibility of User De-Anonymization in Shared Mobile Sensor Data"*
3rd International Workshop on Sensing Applications on Mobile Phones (*PhoneSense '12)*
Toronto, Canada – November 6th 2012

[T.24] *"Opportunistic CrowdSensing",* Microsoft Research Asia Faculty Summit.
Tianjin, China – October 27th 2012

[T.23] *"Quantifying the Threat of User De-Anonymization in Shared Mobile Sensor Data"*
Institute of Computing Technology, Chinese Academy of Sciences
Beijing, China – October 25th 2012

[T.22] *"Opportunistic CrowdSensing",* Forum on Information Technology 2012 (*FIT '12*)
Tokyo, Japan – September 4th 2012

[T.21] *"Applications and Elements of Sensory Computing",* Aoyama Gakuin University
Tokyo, Japan – September 3rd 2012

[T.20] *"Opportunistic CrowdSensing"*
3rd International Workshop on Networks of Cooperating Objects (*CONET '12*)
Bejing, China – April 16th 2012

2011 **[T.19]** *"Windows Phone: An Enabling Platform for Smartphone Sensing Research"*
4th Microsoft Research Asia Joint Laboratory Symposium
Beijing, China – September 27th 2011

[T.18] *"Enabling Large-scale Human Activity Inference on Smartphones using Community Similarity Networks (CSN)"*, 13th International Conference on Ubiquitous Computing (*Ubicomp '11*). Beijing, China – September 21st 2011

[T.17] "*Tapping into the Vibe of the City Using VibN*"
1st International Symposium on Social and Community Intelligence (*SCI '11*)
Beijing, China – September 18th 2011

[T.16] *"BeWell: A Smartphone Application to Monitor, Model and Promote Wellbeing"*
5th International Conference on Pervasive Computing Technologies for Healthcare 2011 (*Pervasive Health '11*). Dublin, Ireland – May 25th 2011

[T.15] "Community-Guided Mobile Phone Sensing Systems"
Ph.D. Dissertation Defense. Hanover, NH, USA – February 23rd 2011

2010 **[T.14]** *"Hapori: Context-based Local Search for Mobile Phones using Community Behavioral Modeling and Similarity"*, 12th International Conference on Ubiquitous Computing (*Ubicomp '10*). Copenhagen, Denmark – September 28th 2010

[T.13] *"Research in the App Store Era: Experiences from the CenceMe App Deployment on the iPhone"*, 1st International Workshop Research in the Large: Using App Stores, Markets, and other Wide Distribution Channels in UbiComp Research
Copenhagen, Denmark – September 26th 2010

[T.12] *"Community-Guided Learning: Exploiting Mobile Sensor Users to Model Human Behavior"*, 24th Conference on Artificial Intelligence (*AAAI '10*)
Atlanta, GA, USA – July 14th 2010

[T.11] *"Halo: Managing Node Rendezvous in Opportunistic Sensor Networks"*, 6th International Conference on Distributed Computing in Sensor Systems (*DCOSS '10*)
Santa Barbara, CA, USA – June 22nd 2010

[T.10] "Mobile Phone Sensing: Big Data and Small Smart Phones"
Microsoft Research Asia. Beijing, China – May 13th 2010

[T.09] "Mobile Phone Sensing is the Next Big Thing!" (co-presented with Emiliano Miluzzo)
Computer Science Department Symposium, Dartmouth College.
Hanover, NH, USA – January 13th 2010

[T.08] *"Classification Pipeline Tuning for Mobile Sensing Systems"*, 3rd Annual Dartmouth Computer Science Research Symposium (*CSRS '10*). Hanover, NH, USA – January 9th 2010
[Best Presentation Award]

2009 **[T.07]** *"SoundSense: Scalable Sound Sensing for People-Centric Sensing Applications on Mobile Phones"*, 7th ACM Conference on Mobile Systems, Applications, and Services (*MobiSys '09*). Krakow, Poland – June 24th 2009

2008 **[T.06]** *"Sensing Meets Mobile Social Networks: The Design, Implementation and Evaluation of the CenceMe Application"*, 7[th]ACM Conference on Embedded Network Sensor Systems (*Sensys '08*). Raleigh, NC, USA – November 7th 2008

[T.05] *"Cooperative Techniques Supporting Sensor-based People-centric Inferencing"*, 6th International Conference on Pervasive Computing (*Pervasive '08*)
Sydney, Australia –May 22nd 2008

[T.04] *"Urban Sensing Systems: Opportunistic or Participatory?"*, 9th Workshop on Mobile Computing Systems and Applications (*HotMobile '08*)
Napa Valley, CA, USA – February 25th 2008

2007 **[T.03]** *"The BikeNet Mobile Sensing System for Cyclist Experience Mapping"*, 6th ACM Conference on Embedded Network Sensor Systems (*Sensys '07*)
Sydney, Australia – November 7th 2007

[T.02] *"Ambient Beacon Localization: Using Sensed Characteristics of the Physical World to Localize Mobile Sensors"*, 4th IEEE Workshop on Embedded Networked Sensors (*EmNets '07*). Cork, Ireland – June 25th 2007

2006 **[T.01]** *"The Influence of Microprocessor Instructions on the Energy Consumption of Wireless Sensor Networks"*, 3rd IEEE Workshop on Embedded Networked Sensors (*EmNets '06*)
Cambridge, MA, USA – May 30th 2006

REFERENCES

Andrew T. Campbell
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Associate Professor
Cornell University
tanzeem.choudhury@cornell.edu

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landay@stanford.edu

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destrin@cs.cornell.edu

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dganesan@cs.umass.edu