Deborah L. Estrin   **Last Updated 02/06/15**
Cornell Tech
111 8th Avenue, Suite 302
New York, New York 10011
telephone: 1+917-675-4954
e-mail: destrin@cs.cornell.edu
web page: http://destrin.smalldata.io/

EDUCATION

1985-Ph.D.   Electrical Engineering and Computer Science
                Massachusetts Institute of Technology, Boston, MA.
                Supervisors: J. Saltzer (Chair), J. Meldman, M. Sirbu, G. Walker.
                Thesis: Access to Inter-Organization Computer Networks.
1982-M.S.   Electrical Engineering and Computer Science
                Massachusetts Institute of Technology, Boston, MA.
                Supervisors: J. Saltzer (Chair)
                Thesis: Data Communications over Cable
1980-B.S.   Electrical Engineering and Computer Science
                University of California, Berkeley

PROFESSIONAL EXPERIENCE

2013-Current   Professor, Computer Science, Cornell Tech; and
                Professor, Healthcare Policy and Research, Weill Cornell Medical College
                Founder, Healthier Life Hub, Jacobs Technion-Cornell Institute, Cornell Tech.
2011-Current   co-Founder, Open mHealth, non-profit startup, http://openmhealth.org
2000-2012   Professor, Computer Science Department, UCLA
2006-2012   Professor, Electrical Engineering, UCLA, Joint Appointment
2002-2012   Director, Center for Embedded Networked Sensing, an NSF Science and Technology
                Center, Headquartered at UCLA
1998-2000   Professor, Computer Science Department, and Project Leader, USC Information Sciences
                Institute
1992-1998   Associate Professor, Computer Science Department, USC
1986-1992   Assistant Professor, Computer Science Department, USC

TEACHING EXPERIENCE
Recent Courses Taught and Developed (*)
- CS5555 Health Tech Data and Systems, Spring 2015, With Daniel Stein (WCMC), MEng CS
- CS5555 Mobile Health, Spring 2014, Cornell Tech, MEng CS
- CS5454 Mobile and Ubiquitous Systems, Fall 2013 and 2014, Cornell Tech, MEng CS
- CS5190 Computer Networking, Spring 2013, Cornell Tech, MEng CS
- CS219 Participatory Sensing
- CS213 Distributed Embedded Systems
- CS199 Directed Undergraduate Research
- CS194 Honors Undergraduate Research Program
- CS118 Computer Networks (taught annually), BS and MS students
- CS113 Intro to Distributed Embedded Systems

Doctoral Student Advising
Current PhD Students:
Faisal Alquaddoomi (UCLA), Andy Hsieh (UCLA, Jinha Kang (UCLA), Brent Longstaff (UCLA), Fabian
Okeke (Cornell), Longqi Yang (Cornell)

Completed PhD Students (UCLA and USC, alphabetical order):
Lee Breslau (ATT Labs), Nirupama Bulusu (Oregon State), Alberto Cerpa (UC Merced), Ron Cocchi (DirectTV), Jeremy Elson (Microsoft Research), Hossein Falaki (Apple), Deepak Ganesan (U Mass Amherst), Lewis Girod (MIT), Benjamin Greenstein (Google), Ahmed Helmy (Univ Florida), Shai Herzog (Microsoft), Bau-Yi Polly Huang (Univ of Taiwan), Josh Hyman (Google), Chalermek Intanagonwiwat (Univ Thailand), Donnie Kim (Intel), Teresa Ko (Google), Kanna Satish Kumar (Packet Design), Charley Ching-Gung Liu, Martin Lukac (NexLeaf), Danny Mitzel (Nokia), Minyoung (Min) Mun (Samsung), Andrew Parker (Google), Graham Phillips, Pavlin Radoslavov (ICIR), Nithya Ramanathan (NexLeaf), Anoop Reddy (HP Labs), Sasank Reddy (Kullect), Reza Rejaie (Oregon State), Vids Samanta (Nokia), Thomas Schoellhammer (Google), Puneet Sharma (HP Labs), Thanos Stathopoulos (Google), Gene Tsudik (UC Irvine), Kannan Varadhan (Procket), Hanbiao Wang (St Jude Medical), Liming Wei, Ya Xu (Cisco), Haobo Yu (Packet Design), Yan Yu (MS), Daniel Zappala (Univ Oregon), Jerry Zhao (Google)

HONORS

Doctor Honoris Causa, Uppsala University, Sweden 2011
ACM Sigmobile Outstanding Contribution Award - 2009
National Academy of Engineering, Elected Member - 2009
Doctor Honoris Causa, Ecole Polytechnique Federale de Lausanne, Switzerland 2008
Distinguished Alumnus Award in Computer Sciences & Engineering, UC Berkeley 2008
Women in Technology International Hall of Fame Award - 2008
MacKay Fellow, UC Berkeley – 2007-2008
Campbell Lecturer, Southampton University – May 2007
American Academy of Arts & Sciences, Elected Fellow 2007
Anita Borg Institute's Women of Vision award for Innovation 2007
First Association for Computing Machinery's Committee on Women in Computing (ACM-W) Athena Lecturer – 2006-2007
Jon Postel Endowed Chair – 2005
Institute of Electrical and Electronics Engineers (IEEE) Fellow Award – 2004
American Association for the Advancement of Science (AAAS) Fellow Award – 2001
Association for Computing Machinery (ACM) Fellow Award – 2000
Okawa Foundation Award – 1997
National Science Foundation – Presidential Young Investigator Award – 1987 to 1992
Vinton Hayes Communication Fellowship, MIT – 1981

PROFESSIONAL ACTIVITIES: EDITORIAL and ADVISORY COMMITTEES
Publications and Conferences
· Guest co-Editor, IEEE Internet Computing Special Issue - Internet of You: Data Big and Small, To appear 2015
· Technical Program Committee Member, 2nd Physical Analytics workshop (WPA-15), held in conjunction with Mobisys 2015, Florence Italy
· Scientific program committee member, Digital Disease Detection Conference, held in conjunction with WWW 2015, Florence Italy
· Judge, Qualcomm Tricorder XPRIZE, 2014
· Program Co-Chair, Workshop on Physical Analytics, ACM Mobisys, New Hampshire, June 16, 2014
· Organizing committee, HealthDataPalooza, June 2014
· Co-Organizer, Social-Mobile-Cloud meets Medicine, December 17, 2013, Technion University, Haifa Israel.

- Member, World Economic Forum, Network of Global Agenda Councils, Robotics and Smart Devices Council, 2012-2013.
- Technical Program Committee Member, ACM Mobisys, 2013
- Co-PI, Intel Science and Technology Center on Pervasive Computing, http://istc-pc.washington.edu. 2010-2012.
- Steering Committee, Health Data Initiative (HDI), 2012
- Technical Program Committee Member, SocialUrb, Workshop on Social Connections in the Urban Space 2011
- Technical Program Committee Member, PhoneSense, the 2nd International Workshop on Sensing Applications on Mobile Phones 2011 and 2012
- Technical Program Committee Member, MobiHeld, the 3rd ACM SOSP Workshop on Networking, Systems, and Applications on Mobile Handhelds 2011
- IEEE Pervasive Computing Board, 2009 – 2011, Member
- Program Committee Member, 1st Annual Symposium on Computing for Development 2010
- Program Committee Member, MobiHeld, the Second ACM SIGCOMM Workshop on Networking, Systems, and Applications on Mobile Handhelds 2010
- Program Committee Member, MobiSys, International Conference on Mobile Systems, Applications, and Services 2010
- Program Committee Member, Ubicomp, 12th International Conference on Ubiquitous Computing 2010
- Technical Program Committee Member, ACM HotMobile, Eleventh Workshop on Mobile Computing Systems and Applications 2010
- Associate Editor, ACM Transactions on Sensor Networks, 2004-2010
- Program Committee Member, Engaging Data: First International Forum on the Application and Management of Personal Electronic Information 2009
- Program Committee Member, MobiSys, International Conference on Mobile Systems, Applications, and Services 2009
- Editorial Board, Communications of the Association of Computing Machinery (CACM), 2007-2009
- Technical Program Committee Member, Information Processing in Sensor Networks (IPSN) 2009
- Program Committee Member, MobiSys 2008, 6th International ACM Sigmobile Conference on Mobile Systems, Applications, and Services 2008
- Technical Program Committee Member, 18th Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2007
- Technical Program Committee Member, ACM Special Interest Group on Data Communications (ACM Sigcomm - Data Communication Festival) 2007
- Technical Program Committee Member, Fourth Workshop on Embedded Networked Sensors (EmNets), 2007
- Technical Program Committee Member, International Conference on Distributed Computing in Sensor Systems (DCOSS) 2007
- Steering Committee, Sixth International Conference on Information Processing in Sensor Networks (IPSN) 2007
- Program Committee Member, International Workshop on Ambient Intelligence, Media, and Sensing (AIMS) 2007
- Technical Program Committee Member, ACM Mobicom, Workshop on Challenged Networks (Sigcomm CHANTS) 2007
- Program Committee Member, ACM International Workshop on Algorithmic Aspects of Wireless Sensor Networks (ALGOSENSORS) 2006
- Technical Program Committee Member, ACM Special Interest Group on Data Communications Workshop on Challenged Networks

(Sigcomm CHANTS) 2006
- Program Committee Member, Fourth Workshop on Hot Topics in Networks, (HotNets IV) 2005
- Program Committee Member, International Conference on Distributed Computing in Sensor Systems (DCOSS), 2005
- Program Committee, ACM International Conference on Embedded Networked Sensor Systems (Sensys) 2004
- Program Committee, ACM International Workshop on Algorithmic Aspects of Wireless Sensor Networks (ALGOSENSORS) 2004
- Program Committee, ACM International Conference on Mobile Systems, Applications, and Services (MobiSys) 2004
- Associate Editor for the IEEE Magazine on Pervasive Computing, 2001-2004
- ACM International Conference on Embedded Networked Sensor Systems (SenSys) 2003 General co-chair and Steering Committee Chair
- Committee Member, Real Time Systems Symposium (RTSS) 2003
- Workshop Program Committee Member, ACM International Workshop on Wireless Sensor Networks and Applications (WSNA) 2003
- Member of program committee, First International Sensor Network Protocols and Applications (SNPA) Workshop, (2002-2003)
- Program Committee Member, ACM OSDI, December 2002
- Program Committee Member, ACM Hotnets, October 2002
- Program Committee Member, ACM International Workshop on Wireless Sensor Networks and Applications (WSNA), September 2002
- Program Committee Member, ACM International Conference on Mobile Computing and Networking (Mobicom), September 2002
- Editor, Eurasip Journal, Special Issue on Sensor Networks, 2002
- Technical Program Committee Member, IEEE Mobile Ad Hoc Networking Committee (MobiHoc), Boston, MA, August 11, 2000
- Co-Editor, Communications of the Association of Computing Machinery (CACM) Special Issue, "Embedding the Internet," May 2000
- ACM Sigcomm, Program Committee Member, 1991-2000
- Program Committee Member, Association for Computing Machinery (ACM) Special Interest Group on Data Communication (Sigcomm), 1991 – 1999
- Technical Program Co-Chair, Association for Computing Machinery (ACM) Special Interest Group on Data Communication (Sigcomm), 1996
- IEEE International Conference on Computer Communications (INFOCOM), Program Committee Member, 1990, 1991, 1993-98
- IEEE/ACM Transactions on Networking, member of the Editorial Board, 1993-1998
- Program Committee Member, IEEE Global Telecommunications Conference (Globecom), 1994
- Guest Co-Editor, IEEE Journal on Selected Areas in Communications, Special Issue on Internetworking, 1993-1994
- Founding Editor, Journal of Internetworking Research and Experience, (Wiley), 1989 – 1993
- Program Committee Member, ACM Conference on Computer and Communications Security, 1993
- Program Committee Member, International Federation for Information Processing (IFIP) International Conference on Integrated Network Management, 1989 – 1993
- Program Committee and Tutorial Organizer, INET 92, Kobe, Japan, 1992
- Program Committee Member, International Federation for Information Processing/Institute of Electrical and Electronics Engineers (IFIP/IEEE) Distributed Systems: Operations and Management Workshop, 1991

- Program Committee Member, IEEE International Conference on Computer Communications (INFOCOM), 1990 – 1991
- Program Committee Member, Institute of Electrical and Electronics Engineers (IEEE) Symposium on Security and Privacy, 1986 – 1989
- Program Committee Member, Telecommunications Policy Research Conference, 1987

Government and Academic Research and Advisory Committees
- National Research Council, Computer Science and Telecommunications Board, Study Chair, Computing Research for Sustainability, 2011-12.
- Institute of Medicine's Planning Committee for the Health Data Initiative Forum, 2012, Member
- Go Viral to Improve Health: NAE-IOM Health Data Collegiate Challenge, 2012, Judge
- Center for Technology and Behavioral Health, Expert Team Working Group on Emerging Technologies, 2011 - 2016, Scientific Advisory Board Member and Chair
- AcademyHealth, Relevant Evidence to Advance Care and Health (REACH) Challenge– Enabling Access to Relevant, Timely, and Useful Information to Improve Health and Health Care, 2011, Judge
- UCLA Mobile Steering Committee, 2011-2012, Member
- National Academy and the United States Institute of Peace Roundtable on Technology, Science and Peacebuilding, 2011 – 2012, Member
- UCLA's Information Technology Planning Board (ITPB), 2010 – Present, Member
- The President's Council of Advisors on Science and Technology (PCAST) and the President's Innovation and Technology Advisory Committee (PITAC) to review the Networking and Information Technology Research and Development (NITRD) Program, 2010 – 2012, Working Group Member
- International Computer Science Institute, (ICSI) Board of Trustees, 2009 – 2012, Member
- Long Term Ecological Research (LTR) Advisory Board, 2009 – 2010, Member
- National Academy of Engineering President's Grand Challenges Advisory Committee, 2009 – 2011, Member
- Alfred P. Sloan Research Fellowships in Computer Science Program Committee, 2008 – 2011, Member
- ACM Athena Lecturer Committee, 2007-2011, Member
- Dan David Prize Review Committee for the chosen field of "Computers and Telecommunications" within the Future Time Dimension, 2010, Member
- Computer Science and Telecommunications Board's (CSTB) Committee on Engaging the Computer Science Research Community in Healthcare Informatics, 2007-2010, Member
- Cork Institute of Technology, Ireland, NEMBES: Networked Embedded Systems Research Programme Advisory Board, 2008-Present, Member
- Computer History Museum Fellows Selection Committee, 2008-2009, Member
- Professor's Chair in Computer Science Search Committee, Faculty of Science and Technology, Uppsala University, 2008, Member
- Crump Institute Faculty Advisory Committee, 2008, Member
- AAAS Electorate Nominating Committee of the Section on Information, Computing and Communication (T), 2007-2010, Elected Member
- Science and Technology Center for Coastal Margin Observation & Prediction (STC CMOP) External Advisory Board, 2007 – 2009, Member
- UCSB, National Consortium on Remote Sensing in Transportation (NCRST) UCSB Department of Transportation (DOT Project) Steering Committee, 2007- 2009, Member
- World Community Grid Advisory Board, 2007- 2009, Member
- University of Southampton, ACM Gender Diversity Committee, 2007-2008, Member

- Initial Nominating Committee for Computing Community Consortium (CCC), November 2006 - April 2007, Member
- IEEE Alexander Graham Bell Committee,2006-2007, Member
- MIT Dept. of Civil and Environmental Engineering Visiting Committee, 2004-2008, Member
- The National Academies Computer Science and Telecommunications Board (CSTB), 2007-2010, Member
- National Ecological Observatory Network (NEON) Senior Management Team, 2003-2008
- Sensor and Sensor Networks subcommittee of the National Ecological Observatory Network (NEON) Network Design Committee, 2003-2007, Chair
- UCLA, Institute for Pure and Applied Mathematics (IPAM) Scientific Advisory Board Member, 2003-2007, Member
- Center for Environmental Analysis – Center of Research Excellence in Science and Technology (CEA-CREST) External Advisory Board 2003, Member
- California Institute for Telecommunications and Information Technology (CAL-IT2) Advisory Board, 2002-2011, Member
- NSF Environmental Research and Education (ERE) Advisory Committee, 2002-2006, Member
- NSF Computer and Information Science and Engineering (CISE) Advisory Committee, 2002-2006, Member
- National Research Council, Computer Science & Telecommunications Board, 1999 – 2000, Editor and Chair, National Research Council, "Embedded Everywhere Report", 2001
- ISAT Study on Sensor Networks, 1997-1998, Chair
- Advanced Research Project Agency, Scalable Systems Study Group, 1996-97, Leader
- National Research Internet Committee, Interdomain Multicast Routing (IDMR) Working Group, 1995 –2000, Member
- Advanced Research Project Agency, Information Science and Technology (ISAT) Advisory Group, 1995 – 1998, Member
- National Research Council, Computer Science and Telecommunications Board, High Performance and Computing and Communications (HPCC) Committee, 1994, Member
- National Research Council, Computer Science and Telecommunications Board, Committee to Study Changing Nature of Telecommunications Industry, January 1993 - December 1993, Member
- National Research Internet Committee, Source Demand Routing Working Group, 1993 – 1996, Co-Chair
- National Research Council, Computer Science and telecommunications Board, Committee to Study Academic Careers for Experimental Computer Scientists, March 1992 - July 1993, Member
- AAAS Section T on Information Computing and Communication, 1990 –Current, Elected Representative, Member-at-Large
- National Research Internet Committee, End-to-End Research Group, 1990 – 1999, Member
- Office of Technology Assessment, Advanced Information Technology and Research Advisory Panel, 1989 – 1990, Member
- National Research Internet Committee, Internet Research Steering Group, 1989 – 1993, Member
- National Research Internet Committee, Autonomous Networks Research Group, 1987 – 1993, Chairperson
- National Science Foundation, Experimental Research in Electronic Submission (EXPRES) Advisory Committee, 1987 – 1988, Member

Commercial and Non-Profit Venture Advising and Activities
- Advisor, City Health Works, www.cityhealthworks.com, January 2015-present
- Advisor, Future Perfect Ventures GP LLC, June 2014-present
- Advisory Board Member, Nexleaf Analytics, http://nexleaf.org/

- Advisory Board Chair, Open mHealth, June 2012-present
- Mentor, Blueprint Health, Summer 2014
- Mentor, NYC BigApps, April-July 2014
- Member of Technical Advisory Board, Kullect, 2011-2013
- Member of Technical Advisory Board, TTI/ Vanguard Inc., 2007- October 2011
- Member of Technical Advisory Board, Sensicast Inc., 2003-2005
- Consulting Professor, Intel Corporation, 2001 – 2003
- Member of Technical Advisory Board, VitalSigns, Inc., 1998 – 2000
- Member of Technical Advisory Board, Fast Forward Networks, Inc., 1998 – 2000
- Board of Directors, Precept Software, Inc., 1995 – 1998
- Consulting Scientist, CISCO Systems, Inc., 1993 – 1998

PUBLICATIONS

Submitted, Under-review, Conference Publications (available upon request from author)

1. *(Submitted) B. Longstaff, C. Hsieh, D. Estrin et al, RoutineSense: Measuring routine regularity with passively collected mobile data, Submitted to Ubicomp 2015 (Submitted March 2015)*
2. *(Submitted) C. Hsieh, F. Alquaddoomi, D. Estrin et al. Small Data: Applications and Infrastructure, Submitted to Ubicomp 2015 (Submitted March 2015)*
3. *(Submitted) Dallas Swendeman, Scott Comulada, Carol Worthman, Deborah Estrin, Mary Jane Rotheram-Borus, Nithya Ramanathan. Validity and Reliability of Brief Smartphone Ecological Momentary Assessments and Daily Diaries for Diet, Stress, and Physical Activity Compared to Brief Recall Self-Reports, Bio-measures, Biomarkers, and Passive Actigraphy Data Monitoring. Submitted to Annals of Behavioral Medicine July 2014.*

Conference Publications

1. F. Alquaddoomi, C. Ketcham, and D. Estrin. The Email Analysis Framework: Aiding the analysis of personal natural language texts. In Workshop on Linking The Quantified Self (LinkQS), Santiago, Chile, September 2014.

2. Cheng-Kang Hsieh, Hongsuda Tangmunarunkit, Faisal Alquaddoomi, John Jenkins, Jinha Kang, Cameron Ketcham, Brent Longstaff, Joshua Selsky, Dallas Swendeman, Deborah Estrin, Nithya Ramanathan, Lifestreams: a modular sense-making toolset for identifying important patterns from everyday life, ACM Sensys, Nov 12-14, 2013, Rome Italy.

3. Hsieh, C.K., Falaki, H., Ramanthan, N., Tangmunarunkit, H., Estrin, D., "HotMobile 2012 Poster: Performance Evaluation of Android IPC for Continuous Sensing Applications, ACM SIGMOBILE Mobile Computing and Communications Review," February 2013.

4. Casillas, J., Doose-Peña, M., Alquaddoomi, F., Millán, R., Jacobson, A., Ganz, P., Estrin, D., "SMS to Promote Risk-Based Late Effect Screenings? A Technical Pilot for Young Adult Cancer Survivors. In Proceedings of the 2012 Annual Conference of Critical Mass, the Young Adult Cancer Alliance," Atlanta, GA, November 2012.

5. Khalapyan, Z., Tangmunarunkit, H., Selsky, J., Sakabu, E., Rocchio, R., Estrin, D., "Hybrid Approaches in Designing Cost Efficient and User Friendly Mobile Interface. Mobility and Web Behavior," MobileHCI Workshop, September 2012.

6. Ramanathan, N., Swendeman, D., Comulada, S., Dawson, B., Rotheram-Borus, MJ., Estrin, D. "Identifying Preferences for Mobile Health Applications Self-Monitoring and Self-Management: Focus Group Findings from HIV-Positive Persons and Young Mothers. Medicine 2.0," Boston, MA, September 2012.

7. Tangmunarunkit, H., Ramanathan, N., Falaki, H., Jenkins, J., Ketcham, C., Longstaff, B., Monibi, M., Ooms, J., Parameswaran, K., Selsky, J., Estrin, D. "Measures and Real-Time Feedback of Diet, Activity, and Stress Using GPS and Accelerometer Enabled Smartphones. Medicine 2.0," Boston, MA, September 2012.

8. Ramanathan, N., Alquaddoomi, F., Falaki, H., George, D., Hsieh, C.K., Jenkins, J., Ketcham, C., Longstaff, B., Ooms, J., Selsky, J., Tangmunarunkit, H., Estrin, D., "ohmage: An open Mobile System for Activity and Experience Sampling." Proceedings of the 6th International Conference on Pervasive Computing Technologies for Healthcare" May 21-24, 2012.

9. Kim, D., Han, K., Estrin, D., "Employing User Feedback for Semantic Location Services," In Proceedings of the 13th International Conference on Ubiquitous Computing," (Ubicomp'11), Beijing, China, September 2011.

10. Estrin, D., Acker, A., Lukac, M., Gracian, I., "Engaging Residents in Community Data Gathering Using Smartphone Technology: A Proof-of-concept Pilot in Boyle Heights," Fourth Annual National CTSA Community Engagement Conference (Poster), Bethesda, MD, August 2011.

11. Falaki, H., Mahajan, R., Estrin, D. "SystemSens: A Tool for Monitoring Usage in Smartphone Research Deployments," In Proceedings of the 6th ACM International Workshop on Mobility in the Evolving Architecture (ACM MobiArch 2011), Washington D.C., June 28, 2011.

12. Kyungsik, H., Graham, E., Vassallo, D., Estrin, D. (2011) Enhancing Motivation in a Mobile Participatory Sensing Project through Gaming. IEEE International conference on Social Computing (SocialCom 2011): workshop in Social Connection in the Urban SpacesSocialUrb-2011:1443-1448.

13. Falaki, H., Lymberopoulos, D., Mahajan, R., Kandula, S., Estrin, D., "A First Look at Traffic on Smartphones," In Proceedings of the Internet Marketing Conference (IMC), Barcelona, Spain, November 2010.

14. Mun, M., Hao, S., Mishra, N., Shilton, K., Burke, J., Estrin, D., Hansen, M., Govindan, R., "Personal Data Vaults: A Locus of Control for Personal Data Streams," In Proceedings of the 6rd International Conference on emerging Networking EXperiments and Technologies (CoNEXT) 2010, Philadelphia, PA, November 30, 2010.

15. Kim, D., Kim, Y., Estrin, D., Srivastava, M., "SensLoc: Sensing Everyday Places and Paths Using Less Energy," In Proceedings of the 8th ACM Conference on Embedded Networked Sensor Systems (SenSys 2010), Zurich, Switzerland, November 3-5, 2010.

16. Hicks, J., Ramanathan, N., Kim, D., Monibi, M., Selsky, J., Hansen, M., Estrin, D., "AndWellness: An Open Mobile System for Activity and Experience Sampling," In Proceedings of the Wireless Health 2010: Academic and Research Conference, La Jolla, CA, October 5-7, 2010.

17. Reddy, S., Estrin, D., Hansen, M., Srivastava, M., "Examining Micro-Payments for Participatory Sensing Data Collections," In Proceedings of the International Conference on Ubiquitous Computing (Ubicomp), Copenhagen, Denmark, September 2010.

18. Ko, T., Soatto, S., Estrin, D., "Warping Background Subtraction," In Proceedings of the 23rd IEEE Conference on Computer Vision Pattern Recognition (CVPR), San Francisco, CA, June 2010.

19. Falaki, H., Mahajan, R., Kandula, S., Lymberopoulos, D., Govindan, R., Estrin, D., "Diversity in Smartphone Usage," In Proceedings of the 8th International Conference on Mobile Systems, Applications, and Services (MobiSys'10), San Francisco, CA, June 2010.

20. Estrin, D., "Participatory Sensing: Applications and Architecture", In Proceedings of the 8th International Conference on Mobile systems, applications and services (MobiSys'10), San Francisco, CA June 2010.

21. Reddy, S., Estrin, D., Srivastava, M., "Recruitment Framework for Participatory Sensing Data Collections," In Proceedings of the Eighth International Conference on Pervasive Computing, Pervasive, Helsinki, Finland, May 17-20, 2010.

22. Reddy, S., Shilton, K., Denisov, G., Cenizal, C., Estrin, D., and Srivastava, M., "Biketastic: Sensing and Mapping for Better Biking," In Proceedings of the 28th ACM Conference on Human Factors in Computing Systems, CHI 2010, Atlanta, Georgia, April 10-15, 2010.

23. Longstaff, B., Reddy, S., Estrin, D., "Improving Activity Classification for Health Applications on Mobile Devices using Active and Semi-Supervised Learning" in Proceedings of the 4th International Conference on Pervasive Computing Technologies for Healthcare 2010, Munich, Germany, March 2010.

24. Ramanathan, N., Schoelhammer, T., Kohler, E., Whitehouse, K., Harmon, T., Estrin, D., "Suelo: Human-assisted Sensing for Exploratory Soil Monitoring Studies," In Proceedings of the 7th ACM Conference on Embedded Networked Sensor Systems (SenSys 2009), Berkeley, CA, November 4-6, 2009.

25. Kim, D.H., Hightower, J., Govindan, R., Estrin, D., "Discovering Semantically Meaningful Places from Pervasive RF-beacons," In Proceedings of the 11th International Conference on Ubiquitous Computing (Ubicomp 2009), Orlando, FL, September 30 – October 3, 2009.

26. Shilton, K., Burke, J., Estrin, D., Govindan, R., Kang, J., "Designing the Personal Data Stream: Enabling Participatory Privacy in Mobile Personal Sensing," In Proceedings of the 37th Research Conference on Communication, Information and Internet Policy (TPRC), Arlington, VA, September 25-27, 2009.

27. Ryder, J., Longstaff, B., Reddy, S., Estrin, D., "Ambulation: A Tool for Monitoring Mobility Patterns Over Time Using Mobile Phones," IEEE International Conference on Social Computing: Workshop on Social Computing with Mobile Phones & Sensors: Modeling, Sensing and Sharing, Vancouver, Canada, August 29-31, 2009.

28. Ko, T., Soatto, S., Estrin, D., "Categorization in Natural Time-Varying Image Sequences," Computer Vision Pattern Recognition: Visual Interpretation and Understanding Workshop, San Francisco, CA June, 2009.

29. Mun, M., Reddy, S., Shilton, K., Yau, N., Burke, J., Estrin, D., Hansen, M., Howard, E., West, R., Boda, P., "PEIR, the Personal Environmental Impact Report, as a Platform for Participatory Sensing Systems Research," In Proceedings of the 7th Annual International Conference on Mobile Systems, Applications and Services, ACM Mobisys 2009, Krakow, Poland, June 22-25, 2009.

30. Reddy, S., Shilton, K., Burke, J., Estrin, D., Hansen, M., Srivastava, M., "Using Context Annotated Mobility Profiles to Recruit Data Collectors in Participatory Sensing," in Proceedings of the 4th International Symposium on Location and Context Awareness, LOCA, Tokyo Japan, May 2009.

31. Lukac, M., Davis, P., Clayton, R., Estrin, D., "Recovering Temporal Integrity with Data Driven Time Synchronization," In Proceedings of the 8th ACM/IEEE International Conference on Information Processing in Sensor Networks, IPSN 2009, San Francisco, CA, April 13-16, 2009.

32. Whitesell, K., Kutler, B., Ramanathan, N., Estrin, D., "A System for Determining Indoor Air Quality from Images of an Air Sensor Captured on Cell Phones," In Proceedings of the Workshop on Applications, Systems, and Algorithms for Image Sensing, ImageSense'08, Raleigh, North Carolina, November 4, 2008.

33. Hyman, J., Hansen, M., Graham, E., Estrin, D., "Estimating the Spectral Reflectance of Natural Imagery Using Color Image Features," In Proceedings of the Workshop on Applications, Systems, and Algorithms for Image Sensing, ImageSense'08, Raleigh, North Carolina, November 4, 2008.

34. Hicks, J., Paek, J., Coe, S., Govindan, R., Estrin, D., "An Easily Deployable Wireless Imaging System," In Proceedings of the Workshop on Applications, Systems, and Algorithms for Image Sensing, ImageSense'08, Raleigh, North Carolina, November 4, 2008.

35. Reddy, S., Shilton, K., Burke, J., Estrin, D., Hansen, M., Srivastava, M., "Evaluating Participation and Performance in Participatory Sensing," In Proceedings of International Workshop on Urban, Community, and Social Applications of Networked Sensing Systems - UrbanSense08, Raleigh, North Carolina, November 4, 2008.

36. Shilton, K., Ramanathan, N., Samanta, V., Burke, J., Estrin, D., Hansen, M., Srivastava, M., "Participatory Design of Urban Sensing Networks: Strengths and Challenges," In Proceedings of the Participatory Design Conference, Bloomington, Indiana, October 1-4, 2008

37. Reddy, S., Burke, J., Estrin, D., Hansen, M., Srivastava, M., "Determining Transportation Mode On Mobile Phones," In Proceedings of the 12th IEEE International Symposium on Wearable Computers (ISWC), Pittsburgh, Pennsylvania,), September 28 – October 1, 2008.

38. Mun, M., Estrin, D., Burke, J., Hansen, M., "Parsimonious Mobility Classification using GSM and WiFi Traces," In Proceedings of the Fifth Workshop on Embedded Networked Sensors (HotEmNets 2008) Charlottesville, VA, June 2-3, 2008.

39. Allen, M., Girod, L., Newton, R., Madden, S., Blumstein, D., Estrin, D., "VoxNet: An Interactive, Rapidly-Deployable Acoustic Monitoring Platform," In Proceedings of the Information Processing in Sensor Networks (IPSN 08) St. Louis, Missouri, April 22-24, 2008.

40. Shilton, K., Burke, J., Estrin, D., Hansen, M., Srivastava, M., "Participatory Privacy in Urban Sensing," In Proceedings of the International Workshop on Mobile Device and Urban Sensing (MODUS 2008), St. Louis, Missouri, April 21, 2008.

41. Allen, M., Graham, E., Ahmadian, S., Ko, T., Yuen, E., Girod, L., Hamilton, M., Estrin, D., "Interactive Environmental Sensing: Signal and Image Processing Challenges" In Proceedings of the ICASSP 2008: IEEE International Conference on Acoustics, Speech and Signal Processing, Las Vegas, NV, USA, March 30 – April 4, 2008.

42. Agapie, E., Chen, G., Houston, D., Howard, E., Kim, J., Mun, M., Mondschein, A., Reddy, S., Rosario, R., Ryder, J., Steiner, A., Burke, J., Estrin, D., Hansen, M., Rahimi, M., "Seeing Our Signals: Combining location traces and web-based models for personal discovery," In Proceedings of the 9th IEEE Workshop on Mobile Computing Systems and Applications (HotMobile 2008), Napa Valley, CA, February 25-26, 2008.

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