

**Anind K. Dey**  
**Associate Professor**  
**Human-Computer Interaction Institute**  
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## EDUCATION

- 9/95 – 12/00     **College of Computing, Georgia Tech**, Atlanta, GA, USA  
**Ph.D. in Computer Science**, specializing in context-aware and ubiquitous computing.  
Thesis titled *Providing Architectural Support for Building Context-Aware Applications*. [T.2] Received Sigma Xi Outstanding Ph.D. Dissertation Award.  
Received **Master of Science in Computer Science** at this time as well.
- 9/93 – 6/95     **School of Aerospace Engineering, Georgia Tech**, Atlanta, GA, USA  
**Master of Science in Aerospace Engineering**
- 9/88 – 5/93     **Simon Fraser University (SFU)**, Burnaby, BC, Canada  
**Bachelor of Applied Science in Computer Engineering**  
Second in class. Thesis titled *Interface Design for the Rough-Ride-Syndrome Truck Diagnostic Project*. [T.1] Received Award of Distinction for thesis work.  
Completed 5 internships as part of degree.

## EMPLOYMENT HISTORY

- 1/12 – 7/12     **Visiting Professor**, Computer Science Department, ETH Zurich. Sabbatical.
- 7/11 – 12/11     **Visiting Professor**, International Institute of Information Technology- Hyderabad, India. Sabbatical.
- 7/09 – present     **Associate Professor**, Human-Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, PA, USA  
Also, affiliate faculty member in Machine Learning Department, Computer Science Department and Electrical and Computer Engineering Department, CMU
- 1/05 – 7/09     **Assistant Professor**, Human-Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, PA, USA
- 2/02 – 5/05     **Adjunct Assistant Professor**, Electrical Engineering and Computer Science Department, University of California at Berkeley, Berkeley, CA, USA
- 8/01 – 8/04     **Senior Researcher**, Intel-Berkeley Lab, Intel Research, Berkeley, CA, USA  
Building software infrastructure for ubiquitous and context-aware computing.  
Focusing on sensor networks and intelligent environments.
- 9/97 – 12/00     **Graduate Research Assistant**, College of Computing, Georgia Institute of Technology, Atlanta, GA, USA  
Built context-aware computing infrastructure and toolkit to support application designers in building context-aware applications. Work was for my PhD thesis.  
(<http://www.cc.gatech.edu/fce/contexttoolkit>)  
[J.2] [J.3] [J.4] [B.1] [C.7] [C.8][C.9] [C.10] [C.11] [C.12] [C.13]

- 9/97 – 12/97 **Research Engineer**, Interval Research Corporation, Palo Alto, CA, USA  
Created an information visualization tool and a context-aware information access prototype.  
(<http://www.interval.com>)
- 6/97 – 9/97 **Independent Contractor**, Motorola, Scottsboro, AZ, USA  
Extended previously built context-aware computing infrastructure for mobile computing environments.  
(<http://www.cc.gatech.edu/fce/cyberdesk>)
- 10/96 – 6/97 **Graduate Research Assistant**, College of Computing, Georgia Institute of Technology, Atlanta, GA, USA  
Built context-aware computing infrastructure for desktop computing environments. Infrastructure provides runtime integration of applications and services to ease designer and user burden. Built using Java and WWW technologies.  
(<http://www.cc.gatech.edu/fce/cyberdesk>)  
[J.1] [C.2] [C.3] [C.4] [C.5] [C.6]
- 6/96 – 10/96 **Research Engineer**, Motorola, Schaumburg, IL, USA  
Developed a prototype in the area of wireless internet services, for accessing various types of personal and public information. Tested the prototype for various human factors issues.  
(<http://www.cc.gatech.edu/fce/savoir>)
- 9/95 – 6/96 **Graduate Research Assistant**, College of Computing, Georgia Institute of Technology, Atlanta, GA, USA  
Assisting in design of a Virtual Geographic Information System (VGIS), a real-time display of terrain, vehicles, and other information. Responsibilities include data conversion, real-time data transfer and construction of virtual environments based on VGIS.  
(<http://www.cc.gatech.edu/gvu/datavis/research/vgis.html>)
- 9/93 – 9/95 **Graduate Research Assistant**, School of Aerospace Engineering, Georgia Institute of Technology, Atlanta, GA, USA  
Assisted in developing a real-time, high fidelity graphical flight simulation model for the Apache helicopter in the Georgia Institute of Technology flight simulation laboratory. Worked on several research projects involving unmanned autonomous helicopters including developing flight simulation models and designing the helicopters.  
Last and largest project was designing an autonomous helicopter that performs reconnaissance and surveillance missions for the US Army, using an Object Oriented Methodology in combination with Concurrent Engineering.  
(<http://asrt.cad.gatech.edu>)  
[C.1]
- 6/92 – 5/93 **Research Engineer**, Andrew Engineering, Inc., Vancouver, BC, Canada  
Researched and designed a neural network for diagnosing vibration problems in tractor trailers. Designed and built vibration sensors and constructed various testing mechanisms. Work was for my undergraduate thesis, for which I received an Award of Distinction.
- 6/92 – 5/93 **Teaching Assistant**, SFU Math Department, Burnaby, BC, Canada  
Taught undergraduate calculus and statistics in a math lab.
- 5/91 – 8/91 **Research Engineer**, Indian Institute of Technology, New Delhi, India  
Worked on a confidential defense project that included designing and building electronic circuits, programming microcomputers, and programming DSP chips.
- 9/90 – 12/90 **Research Engineer**, SFU Micromachining Lab, Burnaby, BC, Canada  
Learned how to create and created microchips on silicon wafers. Built a micro-pump with width of only a few microns, when doing research on artificial heart valves.
- 1/90 – 4/90 **Research Engineer**, Alberta Telecommunications Research Co., Edmonton, Canada  
Assisted a Ph.D. student in designing and building an opto-electronic switching matrix to be used for neural network research. Gained vast experience in fiber optics and in electronic design.

5/89 – 8/89      **Programmer**, Newnes Automation, Inc., Salmon Arm, BC, Canada  
Wrote controller software to guide lasers in evaluating worth of lumber. Designed and built hardware and wrote software for a cable testing device.

## HONORS AND AWARDS

2014              Best Paper, CHI 2014, Lee and Dey

2012              Best Paper Nomination, Ubicomp 2012, Fan, Forlizzi and Dey.

2012              Best Paper, ICOST 2012, Gouin-Vallerand, Roy, Abdulrazak, Giroux and Dey.

2012              Best Paper, DIS 2012, Odom, Zimmerman, Davidoff, Forlizzi, Dey and Lee.

2012              Best Paper Nomination, IUI 2012. Ziebart, Dey and Bagnell.

2011              Best Paper Nomination, CHI 2011. Lee and Dey.

2010              Best Student Paper, Runner Up, ICML 2010. Ziebart, Bagnell and Dey.

2009              Best Paper Nomination, CHI 2009. Dey and Newberger.

2009              Best Paper Nomination, CHI 2009. Lim, Dey and Avrahami.

2007              Georgia Tech Graphics, Visualization and Usability (GVU) Alumni Research Impact Award

2006              Best Paper and Best Performance Award, Design and Emotion 2006. Min Kyung Lee presented.

2004              ACM Recognition of Service Award, ACM SIG Governing Board for organizing Mobisys workshop on context-aware computing

2001              Sigma Xi Outstanding Ph.D. Dissertation, College of Computing, Georgia Institute of Technology. [T.2]

2000              Named Outstanding Graduate Research Assistant, College of Computing, Georgia Institute of Technology.

1996 – 2000      Research funding awarded through Motorola's University Partnership in Research (UPR) program. Received award for Outstanding UPR Presentation at Motorola's Science Advisory Board Associates annual meeting (1997).

1993              Award of Distinction on undergraduate thesis and Honor Roll at SFU. Received Full Assistantship to attend Georgia Institute of Technology.

1992              Won Western Engineering Competition and Conference (WECC) Debate Competition and placed 5th in the Canadian Engineering Competition (CEC). Member of SFU's Gold medal team in an International Micromouse engineering competition.

1988 – 1993      SFU Open Scholarship, covering all tuition for 5 years.

1988 – 1991      William and Ada Isabelle Steel Memorial SFU Entrance Scholarship, \$(CDN)15000/year for 4 years.

## TEACHING EXPERIENCE

### Courses and Seminars Taught

#### **ETH Zurich**

Spring 2012      *Human Sensing Through Mobile Phones and Everyday Objects*, Distributed Systems Seminar (17 students)

#### **IIT Hyderabad**

Fall 2011 *Graduate Human-Computer Interaction* (15 students)

### **Carnegie Mellon University**

Spring 2014 *Ubicomp*, CS 05-437 & 05-837  
Fall 2013 *Programming Usable Interfaces*, CS 05-630 & 05-430  
Spring 2013 *Designing Human-Centered Systems*, CS 05-391 & 05-891 (36 students)  
Fall 2012 *Programming Usable Interfaces*, CS 05-630 & 05-430  
*Supervised User Interface Lab A and C* (46 students)  
Spring 2011 *Designing Human-Centered Systems*, CS 05-391 & 05-891 (19 students) (instructor UCA: 4.0)  
Fall 2010 *Programming Usable Interfaces*, CS 05-630 & 05-430: (instructor UCA: 4.6)  
*Supervised User Interface Lab A and C* (48 students)  
Spring 2010 *Programming Usable Interfaces*, CS 05-630 & 05-430 (42 students) (instructor UCA: 3.82)  
Fall 2009 *Ubiquitous Computing*, CS 05-837 (21 students): designed curriculum (instructor UCA: 3.8)  
Summer 2009 *Masters of HCI Project II*, CS 05-672 (29 students) (instructor UCA: 3.94)  
Spring 2009 *Masters of HCI Project I*, CS 05-671 (29 students) (instructor UCA: 4.25)  
Summer 2008 *Masters of HCI Project II*, CS 05-672 (29 students) (instructor UCA: 4.33)  
Spring 2008 *Masters of HCI Project I*, CS 05-671 (29 students) (instructor UCA: 4.4)  
Summer 2007 *From Smart House to Smart Home*, CS 05-499 and 05-899 (14 students): designed curriculum (instructor FCE: 3.8)  
Spring 2007 *Programming Usable Interfaces*, CS 05-630 & 05-430 (48 students) (instructor FCE: 4.4, 4.4)  
Fall 2005 *Context-Aware Computing*, CS 05-899 (17 students): designed curriculum (instructor FCE: 4.5)  
Spring 2005 *Programming Usable Interfaces*, CS 05-630 & 05-430 (33 students) (instructor FCE: 3.7, 3.6)

### **University of California at Berkeley**

Fall 2003 *Ubiquitous Computing*. EECS 294 (22 students): designed curriculum  
Spring 2002 *Tangible Interfaces: Crafting the Ubiquitous Experience*. EECS 294. (27 students, cotaught): co-designed curriculum  
  
5/03 – 8/03 *Group for User Interface Research weekly seminar*.  
9/01 – 12/02 *Coffeetalk seminar*. Reading group on human-computer interaction and ubiquitous computing.

## **INDIVIDUAL STUDENT GUIDANCE**

### **Post-docs Supervised**

Hannu Kukka, January 2013 – December 2013. Working on the development and evaluation of large-scale networks of public displays.

Shiwei Cheng, since September 2012. Working on applications of eye tracking to the design of interactive displays.

Chin-Hyuk Hong, since May 2009 (now Systems Scientist). Working on applications of machine learning in ubiquitous computing, including predicting mouse motion, and modeling physiological data. [J.14] [C.103] [C.97] [C.95] [C.90]

SeungJun Kim, since May 2005 (now Systems Scientist). Working on applications of context-awareness and augmented reality, including supporting elder drivers. [J.8] [J.7] [C.95] [C.78] [C.73] [C.53]

Charles Gouin-Vallerand, September 2011-September 2012. Working on infrastructure to support city-scale intelligent systems. [J.20][J.18] [C.93] [NC.44]

Choonsung Shin, since November 2010-December 2012. Working on applications of context-awareness and mobile phones.

Katarzyna Wac, September 2009 – August 2010. Working on models of quality of service and quality of experience with physiological and sensor-based systems. [J.14] [C.90] [C.75] [NC.38] [NC.34]  
Jaeyoung Yang, December 2007 – December 2009. Working on applications of machine learning in ubiquitous computing.  
Joe Tullio, May 2005 – May 2006. Worked on understanding how mental models form and evolve as users use complex ubiquitous computing applications. [C.37] [NC.27]

## Research Staff Supervised

Himanshu Zade, May 2013 – present. Visual analytics support for sensor data. [C.110]  
Deepti Aggarwal, May 2013 – November 2013. Development of efficient crowdsourcing algorithms.  
Shruti Kataria, January 2012 – July 2013. Deployment and evaluation of interventions for special education classrooms.  
Julian Rojas Ramos, July 2010 – present. Various machine learning-based tasks and data analysis on the topics of hybrid cars, physiological stress, routines and phone usage. [C.103] [C.97] [C.90]  
Kevin Tassini, November 2010 – August 2012. Modeling how epidemiologists make decisions about infectious disease outbreaks to support the creation of decision-support tools. [C.102] [C.90] [C.84]  
Denzil Ferreira. Summer 2010 – Summer 2010. Android phone development for supporting dual-income families and public transit users. Also, Android phone data collection on battery usage and application usage [J.15] [C.104] [C.90] [C.81]  
Kshama Nagaraja, March 2010 – November 2010. Modeling how epidemiologists make decisions about infectious disease outbreaks to support the creation of decision-support tools.  
Priyanka Shetye, September 2009 – April 2010. Modeling how epidemiologists make decisions about infectious disease outbreaks to support the creation of decision-support tools.  
Vedant Mehta, May 2009 – March 2010. Modeling how epidemiologists make decisions about infectious disease outbreaks to support the creation of decision-support tools.

## Ph.D. Students Supervised

Adrian deFreitas, since September 2013. Working on middleware to support grouping of people and devices and sharing sensor/context data.  
Brandon Taylor, since February 2013. Co-advised by Dan Siewiorek. Working on visual analytics systems for mobile phone and sensor input.  
Dan Tasse, September 2012-December 2013. Working on visual analytics systems for mobile phone and sensor input.  
Nikola Banovic, since September 2012. Co-advised by Jen Mankoff. Working on understanding of routine behavior using mobile phone and sensor input. [C.107]  
Christian Koehler, since September 2011. Working on predictive systems for reducing energy footprints using mobile phones as sensors. [J.21] [C.106] [NC.37]  
Gabriela Marcu, since January 2010. Co-advised by Sara Kiesler. Working on support for children with autism and their caregivers. [C.112] [C.102] [C.99][C.98] [NC.47] [NC.46]  
Senaka Buthpitiya, since September 2009. Co-advised by Martin Griss. Working on advanced infrastructure for context-aware systems, focusing on mobile phone infrastructure for performing anomaly detection and . [C.83] [C.76] [NC.36]  
Chloe Fan, January 2010-August 2012 (left program). Co-advised by Jodi Forlizzi. Working on design aspects for motivating physical activity. [C.100] [C.99]  
Stephanie Rosenthal, September 2007 – May 2012. Co-advised by Manuela Veloso. CMU CSD. Expected graduation: May 2012. Working on machine learning techniques and applications of machine learning in context-aware applications. [J.13] [J.12] [C.86] [C.82] [C.70] [C.61] [C.52] [NC.41] [NC.30] [NC.29]  
Brian Lim, September 2007 – May 2012. CMU HCII. Expected graduation: May 2012. Working on intelligibility in context-aware applications. [C.91] [C.88] [C.74] [C.60] [C.54] [TR.27] [TR.26]  
Matt Lee, September 2005 – August 2012. Working on memory aids for users with mild cognitive impairments. CMU HCII. Expected graduation: *August 2012*. [B.9] [B.5] [C.111] [C.87] [C.80] [C.68] [C.50] [C.49] [C.41] [C.34] [NC.28] [NC.23] [NC.20]

- Scott Davidoff, September 2005-May 2011. Co-advised by John Zimmerman. Working on support for end-user intent-based programming for domestic environments. CMU HCII. How Routine Learners can Support Family Coordination. [B.8] [C.94] [C.79] [C.66] [C.39] [C.36] [C.33] [C.32] [C.31] [NC.22] [NC.19]
- Ian Li, since September 2004-May 2011. Co-advised by Jodi Forlizzi. Working on techniques for conveying self-awareness to users in order to modify their behavior. CMU HCII. Using Contextual Information in Personal Informatics Systems to Reveal Factors that Affect Behavior. [C.89] [C.65] [C.63] [C.48] [C.35] [C.23] [NC.33] [NC.26] [NC.25] [NC.18] [NC.17] [O.24]
- Brian Ziebart, September 2004 – May 2011. Co-advised by Drew Bagnell. Working on developing and applying machine learning techniques to ubiquitous computing. CMU MLD. Modeling Decision Making with Maximum Entropy Inverse Optimal Control. [C.106] [C.92] [C.85] [C.71] [C.59] [C.56] [C.51] [C.46] [C.45] [C.44] [C.38] [C.26] [NC.39] [NC.35] [NC.32] [NC.24]

## Masters Students Supervised

- Chris Beckmann, January 2003 – August 2005. Working on a tangible end-user programming environment [C.23] [NC.14] [TR.22]. UC Berkeley EECS. Master's Report: *Transcate: Accountable Interface Techniques for Context-Aware Applications*. Product Manager at Google.
- Scott Lederer, September 2001 – December 2004. Working on end-user privacy management in ubiquitous computing environments [B.4] [J.5] [C.21] [C.17] [NC.12] [NC.8] [TR.25] [TR.18] [TR.15]. UC Berkeley EECS.  
Master's Report: *Designing Disclosure: Interactive Personal Privacy at the Dawn of Ubiquitous Computing*. Technical Manager at Google.
- Alan Newberger, August 2002 – August 2004. Built system infrastructure to support feedback and control in context-aware applications [C.55] [S.3] [NC.13] [TR.20]. UC Berkeley EECS.  
Master's Report: *Contributory: Mediating Conflicts in Context-Aware Systems*. Currently Technical Manager at Google.
- Ed de Guzman, August 2003 – August 2004. Built and evaluated tangible user interfaces for facilitating awareness between remote individuals. UC Berkeley EECS. [C.30] [C.24]. Master's Report: *PresenceDisplays: Tangible Peripheral Displays for Promoting Awareness and Connectedness*. Currently PhD student at UIUC.
- Min Kyung Lee, September 2005 – August 2007. Coordinating and conducting fieldwork on opportunistic reminders for dual income families with children. [B.8] [C.94] [C.39] [C.36] [C.33] [C.32] [C.31] [NC.22] [NC.19]  
Master's Thesis in School of Design, Carnegie Mellon University: *Augmented Objects for Family Activity Management*. Currently PhD student at CMU HCII.
- Diwakar Goel, August 2008 – present. Conducting research on combining context-awareness and security. [C.62]
- Eisha Kher, August 2008 – present. Conducting research on combining context-awareness and security. [C.62]

## PhD Thesis Committees

- Matthew Kay, University of Washington. Thesis: *TBD*. February 2014– present
- Gerold Hoelzl, Johannes Kepler University, Austria. Thesis: *Goal-Oriented Sensing in Pervasive Computing*. February 2014-present
- Sami Vihavainen, University of Tampere, Finland. Thesis: *Field Studies on User Experience of Automation in Context-Aware Social Media*. June 2013– October 2013.
- Sheryl Yang, Carnegie Mellon University, USA. Thesis: *A formal approach to provide information support for troubleshooting of HVAC related problems*. June 2013– present
- Andreas Riener, Johannes Kepler University, Austria. Habilitation Thesis: *Perceptual Computer Science – Use case: Driver-Vehicle Interaction*. March 2013 – February 2014.
- David Dearman, University of Toronto, Canada. Thesis: *Using Community Authored Content to Identify Place-Specific Activities*. August 2011 – October 2011
- Guzide Atasoy, Carnegie Mellon University. Thesis: *Visualizing and Interacting with Construction Project Performance Information*. November 2010 – February 2012.

Karyn Moffat, University of British Columbia, Canada. Served as External Examiner. Thesis: *Addressing Age-Related Pen-Based Target Acquisition Difficulties*. August 2009 – January 2010.

Adrien Joly, University of St. Etienne, France. Thesis: *Contextual Filtering of Mediated Interactions*. January 2010 – November 2010.

Eugene Medynskiy, Georgia Tech. Thesis: *Interactions for Increasing Self-Efficacy Through Personal Master Experiences*. April 2009 – May 2012.

Mark Assad, University of Sydney, Australia. Thesis: *Active Models for Pervasive Computing*. March 2009 – September 2009.

Dana Pavel, University of Essex, UK. Thesis: *How Technologies can Support and Enhance Self-Reflective Human Experiences*. March 2008 – present. [B.10] [C.101] [C.77] [C.72] [C.69] [C.58] [NC.40]

Choonsung Shin, Gwangju Institute of Science and Technology, Korea. Thesis: *Multi-User Conflict Management for Context-Aware Applications*. September 2008 – November 2009.

Brandon Salmon, Carnegie Mellon University, USA. Thesis: *Putting Home Storage Replica Management into Perspective*. May 2007 – October 2009.

Martin Jonsson, Royal Institute of Technology (KTH), Sweden. Thesis: *Supporting Context-awareness in Ubiquitous Service Environments*. March 2007– June 2007.

Stina Nylander, Swedish Institute of Computer Science, Sweden. Thesis: *Design and Implementation of Multi-Device Services*. October 2006 – February 2007.

Jonna Hakkila, University of Oulu, Finland. Thesis: *Usability with Context-Aware Mobile Applications*. May 2006 – January 2007.

Amir Padovitz, Monash University, Australia. Thesis: *Context Management and Reasoning about Situations in Pervasive Computing*. June 2006 – November 2006.

Tye Rattenbury, University of California, Berkeley, Berkeley, USA. Thesis Proposal: *An Activity-Based Approach to Context-Aware Computing*. May 2005 – December 2008.

Scott Carter, University of California, Berkeley, Berkeley, USA. Thesis Proposal: *Techniques and Tools for Field-Based Early-Stage Study and Iteration of Ubicomp Applications*. April 2005 – September 2006.

Marcela Rodriguez, Centro De Investigación Científica Y De Estudios Superiores De Ensenada (CICESE), Monterey, Mexico. Thesis: *Autonomous Agents in Collaborative Ubiquitous Computing Environments*. January 2003 – December 2005.

Venet Osmani, Waterford Institute of Technology, Ireland. PhD Transfer Report: *Dynamic Abstraction and Provisioning of Context Information*. June 2005.

Csaba Kiss Kallo, University of Trento, Italy. Thesis Proposal: *Supporting Wireless Context-Aware Applications*. May 2003 – August 2004.

## Ph.D. Students Independent Study

### Carnegie Mellon University

Varun Jain, January 2014 – present. Visiting student from University of Grenoble. Using computer vision to determine affect of individuals.

Eija Haapalainen, August 2009 – June 2011. Visiting student from University of Oulu. Designing, implementing and evaluating system to detect cognitive load of users through physiological signals. [C.104] [C.73]

Choonsung Shin, September 2007 – February 2008. Visiting student from Gwangju Insitute of Science and Technology. Designing and implementing system to mediate conflicts in context-aware service environments. [J.10] [C.105] [C.103] [C.96] [C.47]

Jonna Hakkila, August 2006 – December 2006. Visiting student from University of Oulu, Finland. Worked on multiple projects, including mobile phone software that presents visualizations of users' physical activity and concept designs for applications for dual-income families. [B.7]

### University of California at Berkeley

Shwetak Patel, May 2004 – August 2004. Intern at Intel Research Berkeley, from the Georgia Institute of Technology Designed and implemented system that monitored activity in people's homes and presented contextually appropriate information.

Raffay Hamid, May 2003 – August 2003. Intern at Intel Research Berkeley, from the Georgia Institute of Technology. Designed and implemented sensor system and Machine learning system to support the end-user programming by demonstration environment. [C.23]

Louise Barkhuus, January 2003 – August 2003. Visiting Ph.D. student from the IT University of Copenhagen. Performing studies of privacy concerns and acceptability of context-aware services. [C.19] [C.18] [TR.23] [TR.17]

Jeff Heer, November 2002 – May 2003. Designed and implemented machine learning Algorithm for supporting word prediction based on contextual cues.

Gaurav Bhalotia, June 2002 – December 2002. Designed and implemented architecture for tangible instant messaging project.

Kent Lyons, May 2002 – September 2002. Intern at Intel Research Berkeley, from the Georgia Institute of Technology. Built mobile interface for collecting data from a sensor network.

### **Georgia Institute of Technology**

Tanisha Hall, September 1999 – May 2000. Georgia Tech. Worked on a synchronized In/Out Board across multiple locations.

## **Master Students Independent Study, Supervised**

### **Carnegie Mellon University: Co-authored accepted papers include [C.29] [C.32] [C.37] [C.80]**

Pulkit Bhuwalka. Spring 2014. Machine learning support for Android middleware.

eBiz Practicum Team. Summer 2013. Designing and implementing new website and backend for online learning system.

Kanupriya Tavri. Spring 2010. Context-aware infrastructure development to support intelligibility.

Anusha Ramesh. Spring 2010. Android phone development for detecting anomalies in user behavior.

Denzil Ferreira. Fall 2009 – Spring 2010. Android phone development for supporting dual-income families and public transit users. Also, Android phone data collection on battery usage and application usage [C.80]

Christian Koehler. April 2009 – March 2010. Designing and implementing novel energy conserving system (heating and phantom load) based on predictions of when users are coming home. [NC.37]

Kyoung Wha Chang, Jeonghyo Sohn, Shahzad Anwar, Hallong Zhang, Hazim Almuhimedi Joohee Yoo. Summer 2008. Designing and implementing new website and backend for beverage consolidation marketing service.

Minjie Qian. Spring 2008. Conducting field research on dual-income families and their routines.

Gyung Chan Seol. Fall 2007. Conducted field research on dual-income families and their routines.

Nina Shih. Summer 2007. Conducted field research on dual-income families and designed several application concepts that will support them.

Sushmita Subramanian and Karen Au. Spring 2007. Built a memory appliance for people with episodic memory impairments.

Karen Au. Spring 2007. Improved GUI layout and navigation for PEP Systems reporting software.

Hae Young Jeong, Sook Yeon Kim, Sun Young Park and Lalatendu Satpathy. Spring 2007. Designing activity-based reminder prototypes for dual-income families that help parents to feel like better parents.

Bryan Crowe, Summer 2006. Conducted fieldwork on opportunistic reminders for dual income families with children.

K.C. Oh, Summer 2006. Conducted fieldwork on opportunistic reminders for dual income families with children.

Bryan Crowe and Madhu Prabaker, Spring 2006. Built an infrastructure, visualization and interface to support awareness of group member's activities.

K.C. Oh, Spring 2006. Investigated the use of the Sims game engine as a prototyping environment for context-aware applications.

Michael Duergner, March 2006 – September 2006. Built an accounting and accountability system for context-aware services and micro-services. Visiting student from the University of Munich.



Jason Chalecki. September 2005 – May 2006. Developed kiosk interface and study design for study on understanding how users form mental models about complex systems. [C.37]

Elena Kim, Benjamin Koh, Jennifer Ng and Ray Su. Fall 2005 and Spring 2006. CHI Student Design Competition team that followed a user-centered design process in coming up with a cafeteria and cooking design to help college students eat better.

Aditya Chand, Summer 2005. Built a tangible interface for supporting novice computer users in developing nations in using the web. Received second prize in the International Council for Caring Communities (ICCC) student design competition and exhibited work at the United Nations Commission for Social Development. [C.29]

Edwin Chau, Summer 2005. Conducted a summative study of a Flash-based system that supports designers in building interfaces for context-aware applications.

Peter Jones, Summer 2005. Designed and implemented a dieting application that helps make people self-aware of their food intake.

Justin Kodama, Summer 2005. Conducted a formative study of end-users and programming in the home. [C.28]

Samantha Konwinski, Summer 2005. Designed a family of home appliances.

Charles Yiu, Summer 2005. Conducted an ethnography of dual-income families with school-age children to understand opportunities for end-user programming. [C.32]

## Undergraduate Students

**Carnegie Mellon University: Supervised 28 student (11 female) between January 2005 and present time. Of these, 1 student co-authored one or more submitted or accepted publications including [C.28]. One student received the CRA Outstanding Undergraduate Research Award in 2006.**

Shruti Kataria. Fall 2010 – December 2012. Conducting field research on epidemiologists and work practices around infectious diseases.

Vincent Teo. Spring 2010. Built Android application to support cognitive behavior therapy.

Junjie Liang. Fall 2009 – Spring 2010. Built Android application to support cognitive behavior therapy.

Jin Su Kim. Fall 2009 – Summer 2010. Designing navigation application for the Android platform.

Austin Sung. Fall 2009. Designing sensor-based lifelogging application for the iPhone.

Peter Pong. Fall 2009. Designing backend for computational gaming engine.

Jon Miller and Sean Moorman, Summer 2008. Designing personalized in-car navigation system that leverages Brian Ziebart's routing work.

Akshay Goel, Spring 2008. Designing technology for selecting salient cues from experiences of people with episodic memory impairment.

Korina Loumidi, Spring 2008. Conducting field research on dual-income families to understand their daily routines.

Yen-Wen Liu and Peter Pong, Fall 2007 – Spring 2008. Designing a novel input device for manipulating graphical objects in 2.5 dimensions. CREU students.

Christine Chang, Ilkoo Choi, Jerry Feng, Bonnie Lee, and Sung Woo Rhim, Fall 2007. Conducted field research on dual-income families to understand their daily routines.

Heather Tomko, Summer 2007 – present. Building software and running studies for the IMPower project, a system that encourages individuals to use less power, and IMPACT, a system that contextualizes physical activity to help motivate them to be more physically active. REU student from CMU.

Jose Torres, Summer 2007. Built an information access appliance for people with episodic memory impairment. REU student from the University of Puerto Rico.

Stephanie Chu, Summer 2007. Designed and implemented interfaces to help people in green homes understand their resource usage.

Chanin Laohaphan, Spring 2007 – present. Designing web-based and mobile-phone based support for the MapPrentice project, a system that produces driving directions that matches the way drivers prefer to drive.

Yen-Wen Liu, Spring 2007 – Summer 2007. Designing web-based software for IMPACT, a system that contextualizes individuals' physical activity to help motivate them to be more physically active.

Annie Ha, Spring 2007. Designed look and feel for the MapPrentice project, a system that produces driving directions that matches the way drivers prefer to drive.

Jasmine Jung-Min Han, Hannah Lee, Stephanie Rosenthal and David Rush, Spring 2007. Designing, implementing and evaluating an activity-based reminder prototype for dual-income families.

Ajay Ghadiyaram, Spring 2007. Worked with NAVTEQ datasets to create parser for important features.

Gabriel Huh, August 2006 – present. Building software and running studies for IMPACT, a system that contextualizes individuals' physical activity to help motivate them to be more physically active.

Stephanie Rosenthal, August 2006 – August 2007. Worked on a model of reminders for activities of dual-income families with school age children. 2006 CRA Outstanding Undergraduate Research Award Winner (female).

Sara Streng, August 2005 – January 2006. Working on a visual environment for end-user programming of context-aware applications, and an infrastructure to perform resource conflict management in context-aware systems. Visiting student from the University of Munich. [C.28]

**University of California at Berkeley: Supervised 22 students (9 female) between September, 2001 and August 2004. Of these, 5 students co-authored one or more submitted or accepted publications including [C.16, C.21, C.23, C.24, C.28, NC.10, NC.15, TR.16, TR.19]. Students received CRA Outstanding Undergraduate Research Award Runner-up (male) and Finalist (female).**

Kun Gao, May 2003 – August 2004. Working on tangible environment for supporting end-users in building context-aware applications. 2004 CRA Outstanding Undergraduate Research Award Runner-up, 2004 UC Berkeley Information Technology Scholarship Award Recipient

Harlan Yu, May 2003 – August 2004. Applying visual environment for supporting end-users in building context-aware applications to sensor network applications.

Jeff Hwang, January 2003 – August 2004. Designed desktop user interface for end-user management of privacy in ubiquitous computing environments.

Daniel Hsu, January 2003 – August 2004. Worked on machine learning system for end-user programming-by-demonstration of context-aware applications. [C.23]

Austin Park, December 2002 – August 2004. Design and evaluation of tangible instant Messaging clients. [C.24]

Margaret Yau, September 2002 – August 2004 (URAP student). Design and evaluation of tangible instant messaging system, focusing on applications for the elderly. 2004 CRA Outstanding Undergraduate Research Award Finalist (female), 2004 UC Berkeley Information Technology Scholarship Award Recipient. [C.24]

Gary Hsieh, May 2002 – August 2004 (URO student). Evaluation techniques of ambient displays. Work resulted in publication [C.21]

Anthony Gagliano, May 2002 – August 2004. Designed and implemented a tangible instant messaging client. [C.24]

Vu Nguyen, May 2003 – September 2003. Improved visual environment for supporting end-Users in building context-aware applications.

Ian Li, May 2003 – August 2003. Worked on user interface for machine learning system that supports end-user programming-by-demonstration of context-aware applications. [C.23]

Amit Popat, November 2002 – December 2002. Built automatic user interface generator for Context Toolkit widgets.

Karen Teng, September 2002 – March 2003 (URO student). Designed handheld user interface For end-user management of privacy in ubiquitous computing environments.

Ho Kay (Gabriel) Yu, September 2002 – March 2003. Redesigned and implemented Architecture for the mediation of context information (context-aware word prediction).

Elizabeth Yang, September 2002 – December 2002. Conducted survey on use of instant messaging and generated ideas for tangible instant messaging clients.

Tim Sohn, May 2002 – September 2003. Designed and implemented a visual environment that supported end users in building context-aware applications. [C.28] [C.16] [NC.10] [TR.19]

Amy Mok, May 2002 – May 2003. Worked on design of large screen interfaces with Multiple Mimio devices.

Julie Kientz, May 2002 – August 2002. Visiting student from the University of Toledo. Implemented the busmobile and daylight ambient displays and evaluated them. [C.21]

Mira Sutijono, January 2002 – May 2003. Designed and built a mobile, wearable ambient display prototype to indicate safety of local surroundings.

Ted Mao, January 2002 – May 2002. Built GPS software system to support context-aware word prediction project and built web system for keeping track of upcoming conference deadlines.

Chinmayi Bettadapur, September 2001 – May 2003. Design of ambient displays, focusing on a health of the city display. [NC.15]

Morgan Ames, September 2001 – May 2003. Evaluated and designed ambient displays and built an ambient display indicating health of the city. [C.21] [NC.15] [TR.16]

Lisa Chan, September 2001 – June 2002. Implemented stock-based ambient display and led effort on its evaluation.

Steven Chan, September 2001 – May 2002. Worked on design of various ambient displays.

**Georgia Tech: Supervised 8 students (3 female, 4 minority) between May 1997 and December 2000.**

Jeanette Kee, September 1999 – December 2000. Built a system to maintain kitchen inventory and construct weekly shopping list.

Carla Nelson (Office of Naval Research intern). May 2000 – August 2000. Worked on a medicine reminder system for the elderly.

Nelson Sepulveda (Office of Naval Research intern). May 2000 – August 2000. Worked on a context-aware baby monitor and environment control system.

Yohan Kim, January 2000 – August 2000. Worked on a window blinds controller in support of home automation.

John Mooney, May 1999 – May 2000. Ported core components of the Context Toolkit to C++.

Cheryl Holifield (Office of Naval Research intern). May 1999 – August 1999. Worked on building an indoor-outdoor positioning system out of commercial location systems.

2 undergraduate students (Office of Naval Research intern) May 1997 – August 1997.

**PUBLICATIONS**

**Theses**

[T.2] A.K. Dey. *Providing Architectural Support for Building Context-aware Applications*. Georgia Institute of Technology. Atlanta, GA. Ph.D. Thesis. Gregory Abowd (advisor). December 2000.

[T.1] A.K. Dey. *Interface Design for the Rough-Ride-Syndrome Truck Diagnostic Project*. Simon Fraser University. B.Ap.Sc Thesis. Andrew Rawicz (advisor). May 1993.

**Published Books and Book Chapters**

[B.12] D. Siewiorek, A. Smailagic, and A.K. Dey. *Architecture and Applications of Virtual Coaches*. In Schulz, R. (ed.) *Quality of Life Technology Handbook*. CRC Press, 2012

[B.11] D. Pavel, V. Callaghan and A.K. Dey. *Supporting Wellbeing Through Improving Interactions and Understanding in Self-Monitoring Systems*. In Augusto, J.C., Huch, M., Kameas, A., Maitland, J., McCullagh, P.J., Sixsmith, A., and Wichert, R. (eds.) *Handbook of Ambient Assisted Living*, 408-433. IOS Press, 2012

[B.10] A.K. Dey. *Intelligibility in ubiquitous computing systems*. In Ferscha, A. (ed.). *Pervasive Adaptation: The Next Generation Pervasive Computing Research Agenda*, 68.

[B.9] M. Lee and A.K. Dey. *Smart Lifelogging Technology for Episodic Memory Support*. In Rocker, C. and Ziefle, M. (eds.) *Smart Healthcare Applications and Services: Developments and Practices*, 92-120. IGI Global, 2010

[B.8] M.K. Lee, S. Davidoff, J. Zimmerman and A.K. Dey. *Designing for Control: Finding roles for smart homes*. In Desmet, P., van Erp, J. and Karlsson, M. (eds.) *Design and Emotion Moves*. Cambridge Scholars Publishing. Chapter 12, pp. 246-266. 2008.

[B.7] A.K. Dey and J. Hakkila. *Context-Awareness and Mobile Computing*. In Lumdsen, J. (ed.) *Handbook of Research on User Interface Design and Evaluation for Mobile Technology*. Idea Group, Inc. Chapter 13. 2008.

- [B.7] A.K. Dey. *Context-aware computing*. In J. Krumm (ed.) *Ubiquitous Computing Fundamentals*. Chapman & Hall, pp. 321-352, 2009.
- [B.6] A.K. Dey. *It Really is All About Location!* In T. Erickson and D.W. McDonald (eds.) *HCI Remixed: Essays on Works that Have Influenced the HCI Community*. MIT Press. Chapter 10, pp. 61 – 66. 2008.
- [B.5] C. Torrey, M. Burke, M.L. Lee, A.K. Dey, S. Fussell and S. Kiesler. *Approaches to Authority in Online Disaster Relief Communities after Hurricane Katrina*. In Weisband, S. (ed.) *Leadership at a Distance: Interdisciplinary Perspectives*. Lawrence Erlbaum Associates. Chapter 12, pp. 223 – 248. 2007.
- [B.4] S. Lederer, J. Hong, A.K. Dey and J. Landay. *Personal Privacy Through Understanding and Action: Five Pitfalls for Designers*. Book chapter adapted from [J.5]. In Cranor, L. and Garfinkel, S. (eds.) *Designing Security Systems that People Can Use*. O'Reilly Publishing. Chapter 21, pp. 403 – 428. 2005.
- [B.3] J. Mankoff and A.K. Dey. *From Conception to Design: A Practical Guide to Designing Ambient Displays*. Book chapter. In O'Hara, K., Perry, M., Churchill, E. and Russell, D. (eds.) *Public and Situated Displays: Social and Interactional Aspects of Shared Display Technologies*. Kluwer Academic Publishers. pp. 210 – 230. 2003.
- [B.2] A.K. Dey and G.D. Abowd. *Support for adapting applications and interfaces to context*. Book chapter. In Seffah, A. and Javahery, H. (eds.) *Multiple User Interfaces: Cross-Platform Applications and Context-Aware Interfaces*. John Wiley & Sons. Chapter 13, pp. 261 – 294. 2004.
- [B.1] A.K. Dey, D. Salber and G.D. Abowd. *A Conceptual Framework and a Toolkit for Supporting the Rapid Prototyping of Context-aware Applications*. Book chapter adapted from [J.4] from special triple issue *Human-Computer Interaction (HCI) Journal* 16(2-4), special issue on context-aware computing. ISBN 0805896856. January 2002.

## Published Journal Papers

- [J.22] S. Mayer, A. Tschofen, A.K. Dey and F. Mattern. *User Interfaces for Smart Things*. *Transactions on Computer-Human Interaction*, to appear, 2014.
- [J.21] D. Yao, C. Yu, A.K. Dey, C. Koehler, G. Min, L.T. Yang, and H. Jin. *Energy efficient indoor tracking on smartphones*. *Future Generation Computer Systems*, to appear, 2014.
- [J.20] C. Gouin-Vallerand, S. Giroux, B. Abdulrazak, and A.K. Dey. *Intelligible software delivery in smart environments supported by a macro and micro-context awareness mode*. *Springer Journal of Health and Technology* 3(2), 139-151.
- [J.19] B. Ziebart, J.A. Bagnell, and A.K. Dey. *The Principle of Maximum Causal Entropy for Estimating Interacting Processes*. *IEEE Transactions on Information Theory* 59(4), 1966-1980.
- [J.18] C. Gouin-Vallerand, S. Giroux, B. Abdulrazak, and A.K. Dey. *A context-aware service provision system for smart environments based on the user interaction modalities*. *Journal of Ambient Intelligence and Smart Environments*, 5(1), 47-64, 2013.
- [J.17] D. Siewiorek, A. Smailagic, and A.K. Dey. *Architecture and Applications of Virtual Coaches*. *Proceedings of the IEEE* 100(8), 2472-2488, 2012.
- [J.16] D. Ferreira, V. Kostakos, and A.K. Dey. *Lessons Learned from Large-Scale User Studies: Using Android Market as a Source of Data*. *International Journal of Mobile Human-Computer Interaction* 4(3), 28-43, 2012.
- [J.15] S. Ickin, K. Wac, M. Fiedler, L. Janowski, J. Hong and A.K. Dey. *Factors Influencing Quality of Experience of Commonly-Used Mobile Applications*. *IEEE Communications*, 50(4), 48-56, April 2012.
- [J.14] I. Li, A.K. Dey and J. Forlizzi. *Using context to reveal factors that affect physical activity*. *Transactions on Computer-Human Interaction* 19(1), 7.1-7.21, March 2012
- [J.13] S. Rosenthal, M. Veloso and A.K. Dey. *Acquiring Accurate Human Responses to Robots' Questions*. *International Journal of Social Robotics*, 4(2), 117-129, 2012.
- [J.12] S. Rosenthal, M. Veloso and A.K. Dey. *Is Someone in this Office Available to Help Me?: Proactively Seeking Help from Spatially-Situated Humans*. *Journal of Intelligent and Robotic Systems: Theory and Applications*, 66(1-2), 205-221, 2012.
- [J.11] M. Wagner, F. Tsui, G. Cooper, J. Espino, H. Harkema, J. Levander, R. Villamarin, R. Voorhees, N. Millett, C. Keane, A.K. Dey, M. Razdan, Y. Hu, M. Tsai, S. Brown, B.Y. Lee, A. Gallagher,

- and M. Potter. *Probabilistic, Decision-theoretic Disease Surveillance and Control*. Online Journal of Public Health Informatics, 3(3), 2011.
- [J.11] C. Harrison, J. Wiese and A.K. Dey. *Achieving Ubiquity: The Third Wave*. IEEE Multimedia, 17(3), 8-12, 2010.
- [J.10] C. Shin, A.K. Dey and W. Woo. *Toward Combining Automatic Resolution with Social Mediation for Resolving Multi-user Conflicts*. Cybernetics and Systems Journal, 41(2), 146-166, 2010.
- [J.9] A.K. Dey. *Modeling and Intelligibility in Ambient Environments*. Journal of Ambient Intelligence and Smart Environments 1(1), 57-62, 2009.
- [J.8] S. Kim and A.K. Dey. *AR interfacing with prototype 3D applications based on user-centered interactivity*. Journal of Computer-Aided Design. 42(5), pp. 373-386, 2009.
- [J.7] S. Kim, N.P. Mahalik, A.K. Dey, J. Ryu and B. Ahn. *Feasibility and Infrastructural Study of AR Interfacing and Intuitive Simulation on 3D Nonlinear Systems*. Computer Standards and Interfaces. 30(1-2), pp. 36-51, 2007.
- [J.6] A.K. Dey and J.C. Mankoff. *Designing Mediation for Context-Aware Applications*. Transactions on Computer-Human Interaction. 12(1), pp. 53-80, 2005.
- [J.5] S. Lederer, J. Hong, A.K. Dey and J. Landay. *Personal Privacy Through Understanding and Action: Five Pitfalls for Designers*. Personal and Ubiquitous Computing Journal 8(6), pp. 440-454, 2004.
- [J.4] A.K. Dey, D. Salber and G.D. Abowd. *A Conceptual Framework and a Toolkit for Supporting the Rapid Prototyping of Context-aware Applications*. Anchor article of a special triple issue on context-aware computing. Human-Computer Interaction (HCI) Journal 16(2-4). pp. 97-166. 2001. Also published separately by Lawrence-Erlbaum as an edited book in January 2002, ISBN 0805896856.
- [J.3] A.K. Dey. *Understanding and Using Context*. Personal and Ubiquitous Computing Journal 5(1). pp. 4-7. 2001.
- [J.2] G.D. Abowd, A.K. Dey, R.J. Orr, and J. Brotherton. *Context-awareness in Wearable and Ubiquitous Computing*. Virtual Reality Society International Journal 3. pp. 200-211. 1999.
- [J.1] A.K. Dey, G.D. Abowd and A. Wood. *CyberDesk: A Framework for Providing Self-Integrating Context-aware Services*. Knowledge Based Systems 11(1). pp. 3-13. September 1998.

## Refereed Conference Papers

- [C.112] G. Marcu, S. Kiesler and A.K. Dey. Designing for Collaborative Reflection. Pervasive Health 2014, to appear.
- [C.111] S. Buthpitiya, A.K. Dey and M. Griss, CobLE: Confidence-based Learning Ensembles. Computational Science and Computational Intelligence (CSCI 2014), to appear.
- [C.111] M. Lee and A.K. Dey, Real-time feedback for improving medication taking. CHI 2014, to appear. **Best Paper Award.**
- [C.110] H. Zade, S.A. Adimoolam, S. Gollapudi, A.K. Dey and V. Choppella, Edit distance modulo bisimulation: A quantitative measure to study evolution of user models. CHI 2014, to appear.
- [C.109] J. Ramos, J-H. Hong and A.K. Dey. Stress Recognition: A Step Outside the Lab. Physiological Computing Systems 2014, 107-118.
- [C.108] W. Kleiminger, C. Beckel, A.K. Dey and S. Santini. Using unlabeled Wi-Fi scan data to discover occupancy patterns of private households. Poster, SenSys 2013.
- [C.107] N. Banovic, R.L. Franz, K.N. Truong, J. Mankoff, and A.K. Dey. Uncovering information needs for independent spatial learning for users who are visually impaired. ASSETS 2013, paper #24.
- [C.106] C. Koehler, B.D. Ziebart, J. Mankoff and A.K. Dey. TherML: Occupancy prediction for thermostat control. Ubicomp 2013, 103-112.
- [C.105] C. Shin and A.K. Dey. Automatically detecting problematic use of smartphones. Ubicomp 2013, 335-344.
- [C.104] D. Ferreira, E. Ferreira, J. Goncalves, V. Kostakos and A.K. Dey. Revisiting human-battery interaction with an interactive battery interface. Ubicomp 2013, 563-572.
- [C.103] J-H. Hong, J. Ramos, C. Shin and A.K. Dey. An activity recognition system for ambient assisted living environments. Evaluating AAL Systems through Competitive Benchmarking, 148-158.

- [C.102] G. Marcu, K. Tassini, Q. Carlson, J. Goodwyn, G. Rivkin, K. Schaefer, A.K. Dey and S. Kiesler, Why do they still use paper? Understanding data collection and use in Austim education. CHI 2013, 3177-3186.
- [C.101] D. Pavel, V. Callaghan, A.K. Dey, F. Sepulveda, Michael Gardner, The Story of Our Lives: From Sensors to Stories in Self-Monitoring Systems. 4<sup>th</sup> Computer Science and Electronic Engineering Conference (CEEC 2012), 71-76.
- [C.100] C. Fan, J. Forlizzi, A.K. Dey, Considerations For Technology That Support Physical Activity By Older Adults. ASSETS 2012, 33-40.
- [C.99] C. Fan, J. Forlizzi, A.K. Dey, *A Spark of Activity: Exploring Information Art as Visualization for Physical Activity*. Ubicomp 2012, 81-84. **Best paper nominee.**
- [C.98] G. Marcu, A.K. Dey, S. Kiesler, *Parent-driven use of wearable cameras for autism support: a field study with families*. Ubicomp 2012, 401-410.
- [C.97] J-H. Hong, J. Ramos, A.K. Dey, *Understanding Physiological Responses to Stressors during Physical Activity*. Ubicomp 2012, 270-279.
- [C.96] C. Shin, J-H. Hong, A.K. Dey, *Understanding and Prediction of Mobile Application Usage for Smart Phones*. Ubicomp 2012, 173-182.
- [C.95] S. Kim, J-H. Hong, K. Li, J. Forlizzi, and A.K. Dey. *Route Guidance Modality for Elder Driver Navigation*. Pervasive 2012, 179-196.
- [C.94] W. Odom, J. Zimmerman, S. Davidoff, J. Forlizzi, A.K. Dey and M.K. Lee. *A Fieldwork of the Future with User Enactments*. DIS 2012, 338-347. **Best paper award.**
- [C.93] C. Gouin-Vallerand, P. Roy, B. Abdulrazak, S. Giroux and A.K. Dey. *A Macro and Micro Context-Awareness Approach for the Provision of Services in Smart Spaces*. ICOST 2012, 173-181. **Best paper award.**
- [C.92] B.D. Ziebart A.K. Dey and J.A Bagnell. *Probabilistic Pointing Target Prediction via Inverse Optimal Control*. IUI 2012, 1-10. **Best paper award, nominee.**
- [C.91] B.Y. Lim and A.K. Dey. *Investigating Intelligibility for Uncertain Context-Aware Applications*. Ubicomp 2011, 415-424.
- [C.90] A.K. Dey, K. Wac, D. Ferreira, K. Tassini, J. Hong, and J. Ramos. *Getting Closer: An empirical investigation of the proximity of users to their smart phones*. Ubicomp 2011, 163-172.
- [C.89] I. Li, A.K. Dey, and J. Forlizzi. *Understanding my data, myself: supporting self-reflection with ubicomp technologies*. Ubicomp 2011, 405-414.
- [C.88] B.Y. Lim and A.K. Dey. *Design of an Intelligible Mobile Context-Aware Application*. MobileHCI 2011, 157-166.
- [C.87] M.L. Lee and A.K. Dey. *Older adults reflecting on home sensor data*. International Symposium on Quality of Life Technology, 2011.
- [C.86] S. Rosenthal, A.K. Dey and M. Veloso. *Learning Accuracy and Availability of Humans who Help Mobile Robots*. AAAI 2011, 1501-1506.
- [C.85] B. Ziebart, J.A. Bagnell and A.K. Dey. *Maximum Causal Entropy Correlated Equilibria for Markov Games*. Proceedings of the 10<sup>th</sup> International Conference on Autonomous Agents and MultiAgent Systems (AAMAS 2011), 207-214.
- [C.84] K. Tassini, P. Shetye, V. Mehta, A.K. Dey, R. Voorhees, and M. Wagner. *Comprehensive Evaluation of the Infectious Disease Bio-Surveillance System in a County Public Health Department*. Proceedings of CSTE 2011, Council of State and Territorial Epidemiologists Conference.
- [C.83] S. Buthpitiya, P. Zhang, A.K. Dey and M. Griss. *n-gram Geo-Trace Modelng*. Proceedings of Pervasive 2011, 97-114.
- [C.82] S. Rosenthal, A.K. Dey and M. Veloso. *Using Decision-Theoretic Experience Sampling to Build Personalized Mobile Phone Interruption Models*. Proceedings of Pervasive 2011, 170-187.
- [C.81] D. Ferreira, A.K. Dey and V. Kostakis. *Understanding Human-Smartphone Concerns: A Study of Battery Life*. Proceedings of Pervasive 2011, 19-33.
- [C.80] M. Lee and A.K. Dey. *Reflecting on Pills and Phone Use: Supporting Awareness of Functional Abilities for Older Adults*. Proceedings of CHI 2011, 2095-2104.
- [C.79] S. Davidoff, A.K. Dey and J. Zimmerman. *Learning Patterns of Pick-ups and Drop-offs to Support Busy Family Coordination*. Proceedings of CHI 2011, 1175-1184.
- [C.78] S. Kim, J. Forlizzi and A.K. Dey. *Usability of Car Dashboard Displays for Elder Drivers*. Proceedings of CHI 2011, 493-502.

- [C.77] D. Pavel, V. Callaghan and A.K. Dey. *From Self-Monitoring to Self-Understanding: Going Beyond Physiological Sensing for Supporting Wellbeing*. Proceedings of PervasiveHealth 2011, 312-315.
- [C.76] S. Buthpitiya, P. Tague, A.K. Dey and M. Griss. *Anubis: An Attestation Protocol for Distributed Context-Aware Applications*. Proceedings of 6<sup>th</sup> International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP 2010), 251-256.
- [C.75] K. Wac and A.K. Dey. *Body Area Networks for Ambulatory Psychophysiological Monitoring: A Survey of Off-the-Shelf Systems*. Proceedings of the 5<sup>th</sup> International Conference on Body Area Networks (BodyNets 2010), 181-187.
- [C.74] B. Lim and A.K. Dey. *Toolkit to Support Intelligibility in Context-Aware Applications*. Proceedings of Ubicomp 2010, 13-22.
- [C.73] E. Haapalainen, S. Kim, A.K. Dey and J.F. Forlizzi. *Psycho-Physiological Measures to Measure Cognitive Load*. Proceedings of Ubicomp 2010, 301-310.
- [C.72] D. Pavel, V. Callaghan and A.K. Dey. *Looking back in wonder: How self-monitoring technologies can help us better understand ourselves*. Proceedings of Intelligent Environments 2010, 289-294.
- [C.71] B. Ziebart, J.A. Bagnell and A.K. Dey. *Modeling interaction via the principle of maximum causal entropy*. Proceedings of the International Conference on Machine Learning (ICML), 2010, 1255-1262. Received **Best Student Paper, Runner Up**.
- [C.70] S. Rosenthal and A.K. Dey. *Towards maximizing the accuracy of human-labeled sensor data*. In the Proceedings of Intelligent User Interfaces (IUI), pp. 259-268. 2010.
- [C.69] D. Pavel, V. Callaghan and A.K. Dey. *Democratization of healthcare through self-monitoring technologies*. Proceedings of Pervasive Health 2010.
- [C.68] M.L. Lee and A.K. Dey. *Embedded Assessment of Aging Adults: A Concept Validation with Stakeholders*. Proceedings of Pervasive Health 2010, 1-8.
- [C.67] J.A. Callan, G. Siegle, A.K. Dey, M. Spring, A. Rotondi and J. Dunbar-Jacob. *Barriers to CBT Homework: Identification of the problem and a potential technology-enhanced solution (CBT MobileWork)*. Proceedings of the Sixth World Congress of Behavioral and Cognitive Therapies, 2010.
- [C.66] S. Davidoff, A.K. Dey and J. Zimmerman. *How Routine Learners can Support Family Coordination*. Proceedings of CHI 2010, pp. 2461-2470, 2010.
- [C.65] I. Li, A.K. Dey and J.F. Forlizzi. *A Stage-Based Model of Personal Informatics Systems*. Proceedings of CHI 2010, 557-566, 2010.
- [C.64] C. Harrison, A.K. Dey and S.E. Hudson. *Evaluation of Progressive Image Loading Schemes*. Note in the Proceedings of CHI 2010, pp. 1549-1552, 2010.
- [C.63] I. Li, A.K. Dey and J. Forlizzi. *Using Contextual Information to Improve Awareness of Physical Activity*. Engaging Data Forum: The First International Forum on the Application and Management of Personal Electronic Information (EDF 2009).
- [C.62] D. Goel, E. Kher, S. Joag, V. Mujumdar, M. Griss and A.K. Dey. *Context-Aware Authentication Framework*. Proceedings of the 1<sup>st</sup> International Conference on Mobile Computing, Applications and Services (MobiCASE 2009).
- [C.61] S. Rosenthal, A.K. Dey, and M. Veloso. *How Robots' Questions Affect the Accuracy of the Human Responses*. Proceedings of 18th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), pp. 1137-1142, 2009.
- [C.60] B. Lim, and A.K. Dey. *Assessing Demand for Intelligibility in Context-Aware Applications*. Proceedings of Ubicomp 2009, pp. 195-204.
- [C.59] B. Ziebart, N. Ratliff, G. Gallagher, C. Mertz, K.M. Peterson, J.A. Bagnell, M. Hebert, A.K. Dey and S. Srinivasa. *Planning-based Prediction for Pedestrians*. Proceedings of the 2009 IEEE International Conference on Intelligent Robots and Systems (IROS).
- [C.58] D. Pavel, V. Callaghan, A.K. Dey and M. Gardner. *Supporting Introspective Behaviours through Technology*. Proceedings of Intelligent Environments, pp. 413-420, 2009.
- [C.57] S. Kuznetsov, A.K. Dey, and S.E. Hudson. *The Effectiveness of Haptic Cues as an Assistive Technology for Human Memory*. Proceedings of Pervasive 2009, pp. 168-175.
- [C.56] N. Ratliff, B. Ziebart, K. Peterson, J.A. Bagnell, M. Hebert, A.K. Dey and S. Srinivasa. *Inverse Optimal Heuristic Control for Imitation Learning*. Proceedings of AISTATS 2009, pp. 424-431.
- [C.55] A.K. Dey and A. Newberger. *Support for Context Intelligibility and Control*. Proceedings of CHI 2009, pp. 859-868. Received **Best Paper Honorable Mention**.

- [C.54] B. Lim, A.K. Dey and D. Avrahami. *Why and Why Not Explanations Improve the Intelligibility of Context-Aware Intelligent Systems*. Proceedings of CHI 2009, pp. 2119-2128. Received **Best Paper Honorable Mention**.
- [C.53] S. Kim and A.K. Dey. *Simulated augmented reality windshield display as a cognitive mapping aid for elder driver navigation*. Proceedings of CHI 2009, pp. 133-142.
- [C.52] S. Rosenthal, M. Veloso and A.K. Dey. *Asking Questions and Developing Trust*. Proceedings of the AAAI 2009 Spring Symposium on Agents that Learn from Human Teachers: SS09-01-019.
- [C.51] B.D. Ziebart, J.A. Bagnell and A.K. Dey. *Human Behavior Modeling with Maximum Entropy Inverse Optimal Control*. Proceedings of the AAAI 2009 Spring Symposium on Human Behavior Modeling: SS09-04-016.
- [C.50] M.L. Lee and A.K. Dey. *Wearable Experience Capture for People with Episodic Memory Impairment*. Poster in the Proceedings of ISWC 2008, pp. 107-108.
- [C.49] M.L. Lee and A.K. Dey. *Lifelogging Memory Appliance for People with Episodic Memory Impairment*. Proceedings of Ubicomp 2008, pp. 44-53.
- [C.48] G. Hsieh, I.A.R. Li, A.K. Dey, J. Forlizzi, and S.E. Hudson. *Using Visualizations to Increase Compliance in Experience Sampling*. Short paper in Proceedings of Ubicomp 2008, pp. 164-167.
- [C.47] C. Shin, A.K. Dey and W. Woo. *Mixed-Initiative Conflict Resolution for Context-Aware Applications*. Proceedings of Ubicomp 2008, pp. 262-271.
- [C.46] B.D. Ziebart, A. Maas, A.K. Dey and J.A. Bagnell. *Navigate Like a Cabbie: Probabilistic Reasoning from Observed Context-Aware Behavior*. Proceedings of Ubicomp 2008, pp. 322-331
- [C.45] B.D. Ziebart, A.K. Dey and J.A. Bagnell. *Fast Planning for Dynamic Preferences*. Proceedings of the International Conference on Automated Planning and Scheduling (ICAPS) 2008, pp. 412-419.
- [C.44] B.D. Ziebart, A. Maas, J.A. Bagnell and A.K. Dey. *Maximum Entropy Inverse Reinforcement Learning*. Proceedings of AAAI 2008, pp. 1433-1438. Distinguished for being an “exceptional full paper”, meaning it will be presented as both a paper and a poster.
- [C.43] Dey, A.K. *Modeling and Adding Intelligibility to Human Activity*. Proceedings of International Symposium on Virtual Reality, pp. 5-8.
- [C.42] C. Harrison and A.K. Dey. *Lean and Zoom: Proximity-Aware User Interface and Content Magnification*. Note in Proceedings of CHI 2008, pp. 507-510.
- [C.41] M.L. Lee and A.K. Dey. *Providing Good Memory Cues for People with Episodic Memory Impairment*. Proceedings of ASSETS 2007, pp. 131-138.
- [C.40] A. Hurst, J. Mankoff, A.K. Dey and S.E. Hudson. *Dirty Desktops: Using a Patina of Magnetic Mouse Dust to Make Common Interactor Targets Easier to Select*. Proceedings of UIST 2007, pp. 183-186.
- [C.39] S. Davidoff, M.K. Lee, A.K. Dey and J. Zimmerman. *Rapidly Exploring Application Design Through Speed Dating*. Proceedings of Ubicomp 2007, pp. 429-446.
- [C.38] B.D. Ziebart, A.K. Dey and J.A. Bagnell. *Learning Selectively Conditioned Forest Structures with Applications to DBNs and Classification*. Proceedings of Uncertainty in Artificial Intelligence 2007, pp. 458-465.
- [C.37] J. Tullio, A.K. Dey, J. Fogarty and J. Chalecki. *How it Works: A Field Study of Non-Technical Users Interacting with an Intelligent System*. Proceedings of CHI 2007, pp. 31-40.
- [C.36] M.K. Lee, S. Davidoff, J. Zimmerman and A.K. Dey. *Smart Bag: Managing Home and Raising Children*. Proceedings of Designing Pleasurable Products and Interfaces 2007, pp. 434-437.
- [C.35] I. Li, J. Forlizzi, A.K. Dey and S. Kiesler. *My Agent as Myself or Another: Effects on Credibility and Listening to Advice*. Proceedings of Designing Pleasurable Products and Interfaces 2007, pp. 194-208.
- [C.34] C. Torrey, M. Burke, M.L. Lee, A.K. Dey, S. Fussell and S. Kiesler. *Connected Giving: Ordinary People Coordinating Disaster Relief on the Internet*. Proceedings of HICSS 2007, pp. 179.
- [C.33] M.K. Lee, S. Davidoff, J. Zimmerman and A.K. Dey. *Smart Homes, Families and Control*. Proceedings of Design and Emotion 2006. Received **Best Paper and Best Performance Award**.
- [C.32] S. Davidoff, M.K. Lee, C. Yiu, J. Zimmerman and A.K. Dey. *Principles of Smart Home Control*. Proceedings of Ubicomp 2006, pp. 19-34.
- [C.31] S. Davidoff, M.K. Lee, J. Zimmerman and A.K. Dey. *Socially-aware Requirements for a Smart Home*. 2006 IEEE Conference on Intelligent Environments. pp. 45-48.



- [C.30] A.K. Dey and E. De Guzman. *From Awareness to Connectedness: The Design and Deployment of Presence Displays*. Proceedings of CHI 2006, ACM Conference on Human Factors in Computing Systems, pp. 899-908.
- [C.29] A. Chand and A.K. Dey. *Jadoo: A Paper User Interface for Users Unfamiliar with Computers*. CHI 2006 Extended Abstracts (Work In Progress), pp. 1625-1630.
- [C.28] A.K. Dey, T. Sohn, S. Streng and J. Kodama. *iCAP: Interactive Context-Aware Prototyping*. Proceedings of PERVASIVE 2006, 4th International Conference on Pervasive Computing, pp. 254-271. Originally published as tech report and later included in proceedings.
- [C.27] D. Mankoff, A.K. Dey, J. Mankoff and K. Mankoff. *Supporting Interspecies Social Awareness: Using Peripheral Displays for Distributed Pack Awareness*. (Satire) Proceedings of UIST 2005, Eighteenth Annual Symposium on User Interface Software and Technology: 253-258, October 23-26, 2005.
- [C.26] B. Ziebart, D. Roth, R. Campbell and A.K. Dey. *Learning Automation Policies for Pervasive Computing Environments*. Proceedings of the 2<sup>nd</sup> IEEE International Conference on Autonomic Computing: 204-215, June 13-16, 2005.
- [C.25] T. Matthews, A.K. Dey, J. Mankoff, S. Carter and T. Rattenbury. *A Toolkit for Managing User Attention in Peripheral Displays*. Proceedings of UIST 2004, Seventeenth Annual Symposium on User Interface Software and Technology, CHI Letters 6(2): 247-256, October 24-27, 2004. Originally published as tech report and later included in proceedings.
- [C.24] E.S. De Guzman, M. Yau, A. Gagliano, A. Park and A.K. Dey. *Exploring the Design and Use of Peripheral Displays of Awareness Information*. Short paper in the Proceedings of CHI 2004, ACM Conference on Human Factors in Computing Systems, pp. 1247-1250. April 18-23, 2004.
- [C.23] A.K. Dey, R. Hamid, C. Beckmann, I. Li and D. Hsu. *a CAPpella: Programming by Demonstration of Context-Aware Applications*. Proceedings of CHI 2004, ACM Conference on Human Factors in Computing Systems, CHI Letters 6(1): 33-40. April 18-23, 2004. Originally published as tech report and later included in proceedings.
- [C.22] T. Matthews, H-W. Gellersen, K. Van Laerhoven and A.K. Dey. *Augmenting Collections of Everyday Objects: A Case Study of Clothes Hangers as an Information Display*. Proceedings of PERVASIVE 2004, 2nd International Conference on Pervasive Computing: 340-344. April 18-23, 2004.
- [C.21] J. Mankoff, A.K. Dey, G. Hsieh, J. Kientz, M. Ames and S. Lederer. *Heuristic Evaluation of Ambient Displays*. Proceedings of CHI 2003, ACM Conference on Human Factors in Computing Systems, CHI Letters 5(1): 169-176, April 5-10, 2003.
- [C.20] W.K. Edwards, V. Bellotti, A.K. Dey and M. Newman. *Stuck in the Middle: The Challenges of User-Centered Design and Evaluation for Middleware*. Proceedings of CHI 2003, ACM Conference on Human Factors in Computing Systems, CHI Letters 5(1): 297-304, April 5-10, 2003. Originally published as tech report and later included in proceedings.
- [C.19] L. Barkhuus and A.K. Dey. *Is Context-aware Computing Taking Control Away From the User? Three Levels of Interactivity Examined*. Proceedings of UBIComp 2003, 5<sup>th</sup> International Conference on Ubiquitous Computing, pp. 149-156. October 12-15, 2003.
- [C.18] L. Barkhuus and A.K. Dey. *Location-based Services for Mobile Telephony: A Study of Users' Privacy Concerns*. Proceedings of INTERACT 2003, 9th IFIP TC13 International Conference on Human-Computer Interaction, Zurich, Switzerland. pp. 709-712. September 1-5, 2003.
- [C.17] S. Lederer, J. Mankoff and A.K. Dey. *Who Wants to Know What When? Privacy Preference Determinants in Ubiquitous Computing*. Short Talk in the Extended Abstracts of CHI 2003, ACM Conference on Human Factors in Computing Systems, Orlando, FL. pp. 724-725, April 5-10, 2003.
- [C.16] T. Sohn and A.K. Dey. *iCAP: An Informal Tool for Interactive Prototyping of Context-Aware Applications*. Interactive Poster in the Extended Abstracts of CHI 2003, ACM Conference on Human Factors in Computing Systems, Orlando, FL. pp. 974-975, April 5-10, 2003.
- [C.15] A.K. Dey, J. Mankoff, G.D. Abowd and S.A. Carter. *Distributed Mediation of Ambiguous Context in Aware Environments*. Proceedings of UIST 2002, Fifteenth Annual Symposium on User Interface Software and Technology, CHI Letters 4(2): 121-130, October 27-30, 2002.
- [C.14] J. Mankoff, A.K. Dey, M. Moore and U. Batra. *Web Accessibility for Low Bandwidth Input*. Proceedings of the Fifth International ACM SIGCAPH Conference on Assistive Technologies (ASSETS 2002), Edinburgh, Scotland. pp. 17-24, July 8-10, 2002.

- [C.13] K. Nagel, C.D. Kidd, T. O'Connell, A.K. Dey and G.D. Abowd. *The Family Intercom: Developing a Context-Aware Audio Communication System*. Proceedings of UBIComp 2001, 3rd International Conference on Ubiquitous Computing, Atlanta, GA. pp. 176-183. September 30-October 2, 2001.
- [C.12] M.J. Covington, W. Long, S. Srinivasan, A.K. Dey, M. Ahamad and G.D. Abowd. *Securing Context-Aware Applications Using Environment Roles*. Proceedings of the 6<sup>th</sup> ACM Symposium on Access Control Models and Technologies (SACMAT 2001), Chantilly, VA. pp. 10-20. May 3-4, 2001.
- [C.11] A.K. Dey and G.D. Abowd. *CybreMinder: A Context-Aware System for Supporting Reminders*. Proceedings of the 2nd International Symposium on Handheld and Ubiquitous Computing (HUC2K), Bristol, UK. pp. 172-186. September 25-27, 2000.
- [C.10] A.K. Dey. *Enabling the Use of Context in Interactive Applications*. In the CHI 2000 Doctoral Consortium, in the Conference Companion of the 2000 ACM Conference on Human Factors in Computing Systems (CHI 2000), The Hague, Netherlands. pp. 79-80. April 1-6, 2000.
- [C.9] A.K. Dey, D. Salber, and G.D. Abowd. *A Context-based Infrastructure for Smart Environments*. Proceedings of the 1st International Workshop on Managing Interactions in Smart Environments (MANSE '99), Dublin, Ireland. pp. 114-128. December 13-14, 1999.
- [C.8] A.K. Dey, M. Futakawa, D. Salber and G.D. Abowd. *The Conference Assistant: Combining Context-awareness with Wearable Computing*. Proceedings of the 3rd IEEE International Symposium on Wearable Computing (ISWC '99). San Francisco, CA. pp. 21-28. October 20-21, 1999.
- [C.7] D. Salber, A.K. Dey and G.D. Abowd. *The Context Toolkit: Aiding the Development of Context-enabled Applications*. Proceedings of the 1999 ACM Conference on Human Factors in Computing Systems (CHI '99). Pittsburgh, PA. pp. 434-441. May 15-20, 1999.
- [C.6] A.K. Dey. *Context-aware Computing: The CyberDesk Project*. Proceedings of the AAAI 1998 Spring Symposium on Intelligent Environments. Palo Alto, CA. Technical Report SS-98-02. pp. 51-54. March 23-25, 1998.
- [C.5] A. K. Dey, G.D. Abowd and A. Wood. *CyberDesk: A Framework for Providing Self-Integrating Context-aware Services*. Proceedings of the ACM International Conference on Intelligent User Interfaces (IUI '98). San Francisco, CA. pp. 47-54. January 6-8, 1998.
- [C.4] A.K. Dey and G.D. Abowd. *CyberDesk: The Use of Perception in Context-aware Computing*. Extended abstract in the Proceedings of the Workshop on Perceptual User Interfaces (PUI '97). Banff, Canada. pp. 26-27. October 19-21, 1997.
- [C.3] A.K. Dey, G.D. Abowd, M. Pinkerton and A. Wood. *CyberDesk: A Framework for Providing Self-Integrating Ubiquitous Software Services*. Demonstration in the Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '97). Banff, Canada. pp. 75-76. October 14-17, 1997.
- [C.2] A. Wood, A.K. Dey and G.D. Abowd. *CyberDesk: Automated Integration of Desktop and Network Services*. Technical Note in the Conference Companion of the 1997 ACM Conference on Human Factors in Computing Systems (CHI '97). Atlanta, GA. pp. 552-553. March 22-27, 1997.
- [C.1] A.K. Dey and S.A. Kondor. *Flight Test Planning and Tracking Tools for Autonomous UAV Systems*. Proceedings of the 22nd Annual Symposium of the Association of Unmanned Vehicle Systems (UAVS '95). Washington, DC. July 10-12, 1995.

## **Non-Refereed Conference and Workshop Papers**

- [NC.47] G. Marcu, A.K. Dey and S. Kiesler. Collaborative Reflection: Long-Term Sensemaking in Health Services. CHI 2013 Workshop on THEORYHEALTH.
- [NC.46] G. Marcu, A.K. Dey and S. Kiesler. A Broader Perspective on Healthcare Communication: Collaboration Through Behavioral Data Consumption. CHI 2013 Workshop on Patient-Clinician Communication: The Roadmap for Human-Computer Interaction.
- [NC.45] B.Y. Lim and A.K. Dey. Weights of Evidence for Intelligible Smart Environments. Ubicomp 2012 Workshop on Adaptable Service Delivery in Smart Environments.
- [NC.44] C. Gouin-Vallerand, B.Y. Lim and A.K. Dey. *Software provision in smart environments based on fuzzy logic intelligibility*. Ubicomp 2012 Workshop on Adaptable Service Delivery in Smart Environments.

- [NC.43]S.W. Buthpitiya, F. Luqman, B. Xing, M. Griss and A.K. Dey. *Hermes: a Context-Aware Application Development Framework for the Mobile Environment*. AINA 2012 Workshop on Context-Aware Middleware for Ubiquitous Computing Environments.
- [NC.42]S. Rosenthal, M. Veloso and A.K. Dey. *Task Behavior and Interaction Planning for a Mobile Service Robot that Occasionally Requires Help*. AAAI 2011 Workshop on Automated Action Planning for Autonomous Mobile Robots.
- [NC.41]K. Wac, S. Ickin, J-H. Hong, L. Janowski, M. Fiedler and A.K. Dey. *Studying the experience of mobile applications used in different contexts of daily life*. ACM SIGCOMM 2011 Workshop on Measurements up the stack (W-MUST 2011).
- [NC.40]D. Pavel, V. Callaghan and A.K. Dey. *From Self-Monitoring to Self-Understanding*. PervasiveHealth 2011 Workshop on MindCare.
- [NC.39]B. Ziebart, A.K. Dey and J.A. Bagnell. *Probabilistic Cursor Trajectory Prediction via Inverse Optimal Control*. NIPS 2010 Workshop on Machine Learning for Assistive Technologies (MLAT 2010).
- [NC.38]K. Wac and A.K. Dey. *Towards methodology for QoE-QoS evaluation in natural user environments*. MobileHCI 2010 Workshop on Observing the Mobile User Experience.
- [NC.38]K. Wac and A.K. Dey. *Mobile user experience beyond the laboratory: Towards a methodology for QoE-QoS evaluation in natural user environments*. NordiCHI 2010 Workshop on Observing the Mobile User Experience, 5-8.
- [NC.37]C. Koehler, A.K. Dey and J. Mankoff. *Motivate Environmentally Sustainable Thermostat-Use through Goal-Setting, Just-In-Time Recommendations, and Behavior Reflection*. Mobile HCI 2010 Workshop on Nudge and Influence Through Mobile Devices (NIMD'10).
- [NC.36]S.W. Buthpitiya, H. Cheng, F. Sun, M. Griss and A.K. Dey. *Hermes: a Context-Aware Application Development Framework for the Mobile Environment*. Poster in the 11<sup>th</sup> Workshop on Mobile Computing Systems and Applications (HotMobile 2010).
- [NC.35]B. Ziebart, J.A. Bagnell and A.K. Dey. *Maximum Causal Entropy Correlated Equilibria for Markov Games*. AAAI 2010 Workshop on Interactive Decision Theory and Game Theory.
- [NC.34]K. Wac and A.K. Dey. *emoBAN: Improving Quality of Life via Psychophysiological Mobile Computing*. CHI 2010 Workshop on Brain, Body and Bytes: Psychophysiological User Interaction.
- [NC.33]I. Li, A.K. Dey and J. Forlizzi. *Graffiter: Leveraging social media for self reflection*. Crossroads 16(2), pp. 12-13, 2009.
- [NC.32]B.D. Ziebart, J.A. Bagnell and A.K. Dey. *Purposeful Adaptive Behavior Modeling for Robotics*. Presented at the Neural Information Processing Systems (NIPS) 2009 Workshop on Probabilistic Approaches for Robotics and Control.
- [NC.32]A. Puikkonen, J. Häkkinen, J. Mäntyjärvi, and A.K. Dey. *Fusing Social Practices to Smart Home Mobile Interaction Design – A Case Study*, Presented at the MobileHCI 2009 workshop on Context-Aware Mobile Media and Mobile Social Networks.
- [NC.31]A.K. Dey. *Explanations in Context-Aware Systems*, International Joint Conference on Artificial Intelligence (IJCAI) 2009 Workshop on Explanation-Aware Computing.
- [NC.30]S. Rosenthal, A.K. Dey and M. Veloso. *Online Selection of Mediated and Domain-Specific Predictions for Improved Recommender Systems*. International Joint Conference on Artificial Intelligence (IJCAI) 2009 Workshop on Intelligent Techniques for Web Personalization and Recommender Systems.
- [NC.29]A.K. Dey, S. Rosenthal and M. Veloso. *Using Interaction to Improve Intelligence: How Intelligent Systems Should Ask Users for Input*. International Joint Conference on Artificial Intelligence (IJCAI) 2009 Workshop on Intelligence and Interaction.
- [NC.28]M.L. Lee and A.K. Dey. *Using Lifelogging to Support Recollection for People with Episodic Memory Impairment and their Caregivers*. Demonstration in the Proceedings of the 2<sup>nd</sup> International Workshop on Systems and Networking Support for Healthcare and Assisted Living Environments (HealthNet 2008).
- [NC.27]A.K. Dey and J. Tullio. *Adding Intelligibility to Machine Learning-Based Interactive Systems*. Presented at the CHI 2008 Workshop on Usable Artificial Intelligence.
- [NC.26]I. Li, A.K. Dey and J. Forlizzi. *Challenges of Associating Steps with Context to Encourage Physical Activity*. Presented at the CHI 2008 Workshop on Ambient Persuasion.

- [NC.25] J.F. Forlizzi, I.A.R. Li and A.K. Dey. *Ambient Interfaces that Motivate Changes in Human Behavior*. Presented at the Pervasive 2007 Workshop on Ambient Information Systems.
- [NC.24] B.D. Ziebart, J.A. Bagnell and A.K. Dey. *Maximum Entropy Inverse Reinforcement Learning*. Presented at the Neural Information Processing Systems (NIPS) 2007 Workshop on Robotics Challenges for Machine Learning.
- [NC.23] M.L. Lee and A.K. Dey. *Capture and Access Lifelogging Assistive Technology for People with Episodic Memory Impairment*. Presented at the Microsoft Workshop on Intelligent Systems for Assisted Cognition.
- [NC.22] S. Davidoff, M.K. Lee, J. Zimmerman and A.K. Dey. *Nurturing Families by Augmenting Life Control*. Ubicomp 2006 Workshop on Nurturing Technologies in the Domestic Environment.
- [NC.21] A.K. Dey. *Usability in Context-Aware Applications*. Invited talk abstract in the AAAI Technical Report WS-06-12, pp. 1-2. 2006. AAAI 2006 Workshop on Modeling and Retrieval of Context.
- [NC.20] M.L. Lee and A.K. Dey. *Capturing and Reviewing Context in Memory Aids*. Presented at the CHI 2006 Workshop on Designing Technology for People with Cognitive Impairments.
- [NC.19] S. Davidoff, M.K. Lee, J. Zimmerman and A.K. Dey. *Socially-aware Requirements for a Smart Home*. Presented at the CHI 2006 Workshop on The IT@Home: Unraveling Complexities of Networked Devices in the Home.
- [NC.18] I.A.R. Li, J. Forlizzi, A.K. Dey and S. Kiesler. *When the Interface is the User's Face: Ideas for Research and Applications*. Presented at the CHI 2006 Workshop on HCI and the Face. Montreal, Canada. April 23, 2006.
- [NC.17] I.A.R. Li, A.K. Dey and J. Forlizzi. *Monitoring and Feedback to Increase Awareness of Exercise Activities*. Presented at the UBICOMP 2005 Workshop on Monitoring, Measuring and Motivating Exercise: Ubiquitous Computing to Support Fitness. Tokyo, Japan. September 11, 2005.
- [NC.16] A.K. Dey. *End-User Programming: Empowering Individuals to Take Control of Their Environments*. Presented at the CHI 2005 (ACM Conference on Human Factors in Computing Systems) Workshop on The Future of User Interface Design Tools. Portland, OR. April 2-7, 2005.
- [NC.15] M. Ames, C. Bettadapur, A.K. Dey and J. Mankoff. *Healthy Cities Ambient Displays*. Poster at the 5th International Conference on Ubiquitous Computing (UBICOMP 2003), Seattle, WA. October 12-15, 2003.
- [NC.14] C. Beckmann and A.K. Dey. *SiteView: Tangibly Programming Active Environments with Predictive Visualization*. Poster at the 5th International Conference on Ubiquitous Computing (UBICOMP 2003), Seattle, WA. October 12-15, 2003.
- [NC.13] A. Newberger and A.K. Dey. *System Support for Context Monitoring and Control*. Presented at the Ubicomp 2003 (Fifth International Conference on Ubiquitous Computing) Workshop on At the Crossroads: The Interaction of HCI and Systems Issues in UbiComp. Seattle, WA. October 12, 2003.
- [NC.12] S. Lederer, J. Mankoff and A.K. Dey. *Towards a Deconstruction of the Privacy Space*. Presented at the Ubicomp 2003 (Fifth International Conference on Ubiquitous Computing) Workshop on Ubicomp Communities: Privacy as Boundary Negotiation. Seattle, WA. October 12, 2003.
- [NC.11] A.K. Dey and J. Mankoff. *Applying Heuristic Evaluation to Ambient Displays*. Presented at the CHI 2003 (ACM Conference on Human Factors in Computing Systems) Workshop on Providing Elegant Peripheral Awareness. Orlando, FL. April 5, 2003.
- [NC.10] A.K. Dey and T. Sohn. *Supporting End User Programming of Context-Aware Applications*. Presented at the CHI 2003 (ACM Conference on Human Factors in Computing Systems) Workshop on End User Development. Orlando, FL. April 5, 2003.
- [NC.9] J. Mankoff and A.K. Dey. *Evaluation of Ambient Displays*. Presented at the UBICOMP 2002 (4th International Conference on Ubiquitous Computing) Workshop on the Design and Evaluation of Notification Interfaces for Ubiquitous Computing, Goteborg, Sweden. September 29, 2002.
- [NC.8] S. Lederer, A.K. Dey and J. Mankoff. *Everyday Privacy in Ubiquitous Computing Environments*. Presented at the UBICOMP 2002 (4th International Conference on Ubiquitous Computing) Workshop on Socially-informed Design of Privacy-enhancing Solutions in Ubiquitous Computing, Goteborg, Sweden. September 29, 2002.
- [NC.7] A.K. Dey. *Ambient Displays*. 020202: A Social Technologies Dialogue, Berkeley, CA. February 2, 2002.

- [NC.6] A.K. Dey. *Evaluation of Ubiquitous Computing Systems: Evaluating the Predictability of Systems*. Presented at the UBICOMP 2001 (3rd International Conference on Ubiquitous Computing) Workshop on Evaluation Methods for Ubiquitous Computing, Atlanta, GA. September 30, 2001.
- [NC.5] T. O'Connell, P. Jensen, A.K. Dey and G.D. Abowd. *Location in the Aware Home*. Presented at the UBICOMP 2001 (3rd International Conference on Ubiquitous Computing) Workshop on Location Modeling for Ubiquitous Computing, Atlanta, GA. September 30, 2001.
- [NC.4] A.K. Dey and G.D. Abowd. *The Context Toolkit: Aiding the Development of Context-Aware Applications*. Proceedings of the Workshop on Software Engineering for Wearable and Pervasive Computing, Limerick, Ireland. June 6, 2000.
- [NC.3] A.K. Dey and G.D. Abowd. *Towards a Better Understanding of Context and Context-Awareness*. Presented at the CHI 2000 (ACM Conference on Human Factors in Computing Systems) Workshop on the What, Who, Where, When, Why and How of Context-Awareness, The Hague, Netherlands. April 1-6, 2000.
- [NC.2] G.D. Abowd, A.K. Dey, R. Orr and J. Brotherton. *Context-awareness in Wearable and Ubiquitous Computing*. Poster in the Proceedings of the 1st International Symposium on Wearable Computing (ISWC '97), Boston, MA. October 13-14, 1997, pp. 179-180.
- [NC.1] A.K. Dey and G.D. Abowd. *Position Paper on Wearable Computing*. Presented at the CHI 1997 (ACM Conference on Human Factors in Computing Systems) Workshop on Wearable Computing, Atlanta, GA. March 22-27, 1997.

## Other Journal and Conference Participation

- [O.31] A.L. Kun, A. Schmidt, A.K. Dey and S. Boll. "Automotive user interfaces and interactive applications in the car", **Personal and Ubiquitous Computing Journal**: 1-2. Co-editor and co-author of introduction for special issue. 2012.
- [O.30] A.K. Dey and D. Estrin. "Pervasive Healthcare 2010: Two Perspectives", **IEEE Pervasive** **10(3)**: 8-11. Health column. 2011.
- [O.29] I. Li, A.K. Dey, J. Forlizzi, K. Höök, and Y. Medynskiy. Workshop organizer, Personal informatics and HCI: design, theory and social implications. CHI 2011 extended abstracts, 2417-2420.
- [O.28] P. Eslambolchilar, M. Wilson, I. Oakley and A.K. Dey. Workshop organizer, PINC: persuasion, influence, nudge & coercion through mobile devices. CHI 2011 extended abstracts, 13-16.
- [O.27] A.K. Dey and D. Estrin. "Perspectives on Pervasive Health from some of the Field's Leading Researchers", **IEEE Pervasive** **10(2)**: 4-7. Health column. 2011.
- [O.26] S. Hussain, J. Park, A.K. Dey, L. Yang, P.K. Biswas. Co-editor and co-author of introduction for special issue on *Information fusion in future generation communication environments*. **Information Fusion** **12(3)**, 148-149, 2011
- [O.25] A. Schmidt, A.K. Dey, A.L. Kun and W. Spiessl. Special Interest Group organizer for SIG on Automotive User Interfaces: Human Computer Interaction in the Car at CHI 2010.
- [O.24] I. Li, J.F. Forlizzi, and A.K. Dey. Workshop organizer for Workshop on Know Thyself: Monitoring and Reflecting on Facets of One's Life at CHI 2010.
- [O.23] A.K. Dey, J. Hightower, E. de Lara, and N. Davies. Co-editor and co-author of introduction for special issue on *Location-Based Services*. **IEEE Pervasive** **9(1)**, pp. 11-12, 2010.
- [O.22] B. Harrison and A.K. Dey. "What Have You Done with Location-Based Services Lately?", **IEEE Pervasive** **8(4)**: 66-70. Applications column. 2009.
- [O.21] A. Schmidt, A.K. Dey, T. Seder and O. Juhlin. Co-editor of Proceedings of the *1<sup>st</sup> International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (AutomotiveUI) 2009.
- [O.20] J. Hakkila, A. Schmidt, J. Mantyjarvi, A.S. Shirazi, P.M. Akerman and A.K. Dey. Workshop organizer for Workshop on Context-Aware Mobile Media and Social Networks at Mobile HCI 2009.
- [O.19] J.H. Park., J. Ma., L.T. Yang and A.K. Dey. Co-editor of issue on *Intelligent Systems and Services for Ubiquitous Computing*, *Personal and Ubiquitous Computing* **13(7)**. 2009. Editorial, pp. 445-447.

- [O.19] A.K.Dey, A. Kameas, and C. Ramos. Co-editor of *Thematic Issue on contribution of Artificial Intelligence to Ambient Intelligence*, Journal of Ambient Intelligence and Smart Environments 1(3), pp. 207-209, 2009.
- [O.18] M. Mutka, C. Becker, A.K. Dey, F. Lau and G. Zaruba. Editorial of issue on *Percom 2008 Special Issue*, Pervasive and Mobile Computing 4(6), pp. 789-290, 2008.
- [O.18] M. Mutka, C. Becker, A.K. Dey, F. Lau and G. Zaruba. Co-editor of *the IEEE International Conference on Pervasive Computing and Communications*. PerCom 2008 Conference proceedings, 2008.
- [O.18] G.R. Hayes and A.K. Dey, *The Pervasive 2007 Workshops*, IEEE Pervasive Computing 7(1), pp. 85, 2008.
- [O.17] B. Schiele, A.K. Dey, H. Gellersen, B.E.R. de Ruyter, M. Tschelegi, R. Wichert, E.H.L. Aarts and A.P. Buchmann. Co-editor of *European Conference on Ambient Intelligence 2007*. Ambient Intelligence Conference proceedings, 2007.
- [O.16] R. Kravets, A.K. Dey and H. Lei. Co-editor of *the Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services*. MobiQuitous 2007 Conference proceedings.
- [O.15] A.K. Dey, B.N. Kokinov, D. Leake and R. Turner. Co-editor of *Modeling and Using Context, 5<sup>th</sup> International and Interdisciplinary Conference: CONTEXT 2005*. CONTEXT 2005 Conference proceedings.
- [O.14] A. Ferscha, R. Mayrhofer, T. Strang, C. Linnhoff-Popien, A.K. Dey, A. Butz, and A. Schmidt. Co-editor of *Advances in Pervasive Computing*, ISBN #3-85403-191-2, Pervasive 2005 Adjunct Proceedings.
- [O.13] A. Jameson, A. Krueger and A.K. Dey. Co-editor and co-author of issue on *Ubiquitous Computing and User Modeling*. User Modeling and User-Adapted Interaction 15(4). 2005.
- [O.12] T. Kirste, A. Ferscha, A.K. Dey, K. Truong, and M. Hellenschmidt, *Software Architecture for Self Organization: Beyond Ad-Hoc Networking*. Workshop organizer. Workshop at Pervasive 2005 (3rd International Conference on Pervasive Computing), Munich, Germany. May 8-13, 2005.
- [O.11] C. V. Lopes, S. Schaefer, S. Clarke, A.K. Dey, T. Elrad, R.E. Filman, J. Jahnke and T. Willis, *Building Software for Pervasive Computing*. Workshop organizer. Workshop at OOPSLA 2004 (19th Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications), Vancouver, Canada. October 24-28, 2004.
- [O.10] A.K. Dey and M. Ebling, *Context-Awareness*, workshop organizer. Workshop at MobiSys (2nd International Conference on Mobile Systems, Applications and Services), Boston, MA. June 6-9, 2004.
- [O.9] A.K. Dey, A. Schmidt and J.F. McCarthy. Co-editor of *UbiComp 2003: Ubiquitous Computing, 5<sup>th</sup> International Conference*. UbiComp 2003 Conference proceedings.
- [O.8] G. Cockton, P. Korhonen, E. Bergman, S. Bjork, P. Collings, A.K. Dey, S. Draper, J. Gulliksen, T. Keinonen, J. Lazar, A. Lund, R. Molich, K. Nakakoji, L. Nigay, R. Oliveira Prates, J. Rieman, J and C. Synder. Co-editor of CHI 2003 Extended Abstracts CD-ROM, ISBN # 1-58113-637-4. CHI 2003 (ACM Conference on Human Factors in Computing Systems), Orlando, FL. April 5-10, 2003.
- [O.7] V. Bellotti, A.K. Dey, T. Erikson and L. Nigay. Co-editor of CHI 2003 DVD Video Program, ISBN # 1-58113-669-2. CHI 2003 (ACM Conference on Human Factors in Computing Systems), Orlando, FL. April 5-10, 2003.
- [O.6] A.K. Dey, G. Kortuem, A. Schmidt and D. Morse. Co-editor and co-author of editorial of issue on *Situated Interaction and Context-Aware Computing*. Personal and Ubiquitous Computing, 5 (1), 2001.
- [O.5] A.K. Dey, P. Ljungstrand and A. Schmidt. *Distributed and Disappearing User Interfaces in Ubiquitous Computing*, workshop organizer. In the CHI Conference Companion at CHI 2001 (ACM Conference on Human Factors in Computing Systems), Seattle, WA. March 31 - April 5, 2001.
- [O.4] A.K. Dey and G.D. Abowd. *Building Context-Aware Applications*, Tutorial accepted (but declined by author) at CHI 2001 (ACM Conference on Human Factors in Computing Systems), Seattle, WA. March 31 - April 5, 2001.
- [O.3] A. K. Dey. *Building Context-Aware Applications*. Tutorial presented at the 2<sup>nd</sup> International Symposium on Handheld and Ubiquitous Computing (HUC2K), Bristol, UK. September 25-27, 2000.

- [O.2] D.R. Morse, A.K. Dey and S. Armstrong. *The What, Who, Where, When, Why and How of Context-Awareness*. Workshop organizer, in the Proceedings of the CHI 2000 (ACM Conference on Human Factors in Computing Systems), The Hague, Netherlands. p. 371. April 1-6, 2000.
- [O.1] G.D. Abowd and A.K. Dey. *Towards a Better Understanding of Context and Context-Awareness*, panel moderator. Proceedings of the 1st International Symposium on Handheld and Ubiquitous Computing (HUC '99). Karlsruhe, Germany. pp. 304-307. September 27-29, 1999.

## Software

- [S.3] A. Newberger and A.K. Dey. *Contributory*. Software framework for aggregating and visualizing group preferences  
<http://contributory.sourceforge.net>
- [S.2] T. Matthews, A.K. Dey and J. Mankoff. *The Peripheral Display Toolkit*. Software framework for the development of peripheral displays.  
<http://pdtk.sourceforge.net>
- [S.1] A.K. Dey, G.D. Abowd and D. Salber. *The Context Toolkit*. Software framework for the development of context-aware computing applications.  
<http://contexttoolkit.sourceforge.net>

## Patents and Invention Disclosures

- [P.9] J. Santerre and A.K. Dey. "Computational Gaming: A technique for improving the collection of unbiased labels", CMU Invention Disclosure 2010-081, April 2010.
- [P.8] A.K. Dey, J.F. Forlizzi, E. Haapalainen and S. Kim. "Sensor-based Assessment of Cognitive Load", CMU Invention Disclosure 2010-076, March 2010.
- [P.7] J. Zimmerman, A.K. Dey and S. Davidoff. "System and Method of Developing Learned Routine in a Calendar of Schedule", CMU Invention Disclosure 2010-063, March 2010.
- [P.6] A.K. Dey and S. Kim. "Windshield-based augmented reality (AR) 2.5D in-vehicle navigation display", CMU Invention Disclosure 2009-040, November 2008.
- [P.5] A.K. Dey, J.D. Bagnell and B. Ziebart. "Efficient Planning of Route Mapping with Dynamic Real-time Context and Driver Preferences", CMU Invention Disclosure 2008-113, June 2008. System, method and device for predicting navigational decision-making behavior, **Patent awarded** July 2, 2013: #8,478,642.
- [P.4] A.K. Dey and M. Lee. "Lifelogging Support for People with Episodic Memory Impairments", CMU Invention Disclosure 2008-106, May 2008. **Preliminary patent filed**.
- [P.3] C. Harrison and A.K. Dey. "Lean and Zoom – Assistive proximity-aware content and user interface magnification", CMU Invention Disclosure 2008-043, November 2007.
- [P.2] A.K. Dey, J.D. Bagnell and B. Ziebart. "Improved Route Mapping Through Real-Time Context and Driver Preferences", CMU Invention Disclosure 2008-002, July 2007. **Patent Pending**.
- [P.1] M.K. Lee, S. Davidoff, J. Zimmerman and A.K. Dey. "Smart Activity Bag: System and method for understanding and communicating items needed in bag for activity", CMU Invention Disclosure, July 2007.

## Technical Reports

- [TR.27] B.Y. Lim and A.K. Dey. *Evaluating Intelligibility Usage and Usefulness in a Context-Aware Applications*. CMU-HCII Technical Report, March 2012.
- [TR.26] B.Y. Lim and A.K. Dey. *Field Evaluation of an Intelligible Context-Aware Application*. CMU-HCII Technical Report, March 2012.
- [TR.25] S. Lederer, J.I. Hong, X. Jiang, A.K. Dey, J.A. Landay and J. Mankoff. *Towards Everyday Privacy for Ubiquitous Computing*. Technical Report UCB-CSD-03-1283, Computer Science Division, University of California, Berkeley, October 20, 2003; Technical Report IRB-TR-03-037, Intel Research Berkeley, 2003.
- [TR.24] J. Mankoff and A.K. Dey. *From Conception to Design: A practical guide to designing ambient displays*. Technical Report IRB-TR-03-025, Intel Research Berkeley, 2003.
- [TR.23] L. Barkhuus, and A.K. Dey. *Location-based Services for Mobile Telephony: A Study of Users' Privacy Concerns*. Technical Report IRB-TR-03-024, Intel Research Berkeley, 2003.

- [TR.22] C. Beckmann and A.K. Dey. *SiteView: Tangibly Programming Active Environments with Predictive Visualization*. Technical Report IRB-TR-03-019, Intel Research Berkeley, July 8, 2003.
- [TR.21] T. Matthews, T. Rattenbury, S. Carter, A.K. Dey and J. Mankoff. *A Peripheral Display Toolkit*. Technical Report IRB-TR-03-018, Intel Research Berkeley, July 8, 2003.
- [TR.20] A. Newberger and A.K. Dey. *Designer Support for Context Monitoring and Control*. Technical Report IRB-TR-03-017, Intel Research Berkeley, July 8, 2003.
- [TR.19] T. Sohn and A.K. Dey. *Interactive Prototyping of Context-Aware Applications*. Technical Report IRB-TR-03-016, Intel Research Berkeley, July 8, 2003.
- [TR.18] S. Lederer, J. Mankoff and A.K. Dey. *Managing Personal Information Disclosure in Ubiquitous Computing Environments*. Technical Report IRB-TR-03-015, Intel Research Berkeley, July 8, 2003.
- [TR.17] L. Barkhuus and A.K. Dey. *Is Context-Aware Computing Taking Control Away from the User? Three Levels of Interactivity Examined*. Technical Report IRB-TR-03-008, Intel Research Berkeley, May 1, 2003.
- [TR.16] M. Ames and A.K. Dey. *Description of Design Dimensions and Evaluation for Ambient Displays*. Technical Report UCB-CSD-02-1211, Computer Science Division, University of California, Berkeley, November 6, 2002.
- [TR.15] S. Lederer, A.K. Dey and J. Mankoff. *A Conceptual Model and a Metaphor of Everyday Privacy in Ubiquitous Computing Environments*. Technical Report UCB-CSD-02-1188, Computer Science Division, University of California, Berkeley and Technical Report IRB-TR-02-017, Intel Research Berkeley, July 30, 2002.
- [TR.14] W.K. Edwards, V. Belotti, A.K. Dey and M. Newman. *Stuck in the Middle: Bridging the Gap Between Design, Evaluation, and Middleware*. Technical Report IRB-TR-02-013, Intel Research Berkeley, July 1, 2002.
- [TR.13] A.K. Dey, J. Mankoff, G.D. Abowd and S. Carter. *Distributed Mediation of Ambiguous Context in Aware Environments*. Technical Report IRB-TR-02-001, Intel Research Berkeley, April 1, 2002.
- [TR.12] K. Nagel, C.D. Kidd, T. O'Connell, A.K. Dey, and G.D. Abowd. *The Family Intercom: Developing a Context-Aware Audio Communication System*. Technical Report GIT-GVU-01-04, GVU Center, Georgia Institute of Technology, April 2001.
- [TR.12] D. Salber, A.K. Dey and G.D. Abowd. *Designing and building context-aware applications*. Technical Report GIT-GVU, GVU Center, Georgia Institute of Technology, 2001.
- [TR.11] M.J. Covington, W. Long, S. Srinivasan, A.K. Dey, M. Ahamad and G.D. Abowd. *Securing Context-Aware Applications Using Environment Roles*. Technical Report GIT-GVU-00-29, GVU Center, Georgia Institute of Technology, 2000.
- [TR.10] D. Morse and A.K. Dey. *Proceedings of the CHI 2000 (ACM Conference on Human Factors in Computing Systems) Workshop on The What, Who, Where, When, Why and How of Context-Awareness*. Technical Report GIT-GVU-00-18, GVU Center, Georgia Institute of Technology, October 2000.
- [TR.9] A.K. Dey, J. Mankoff and G.D. Abowd. *Distributed Mediation of Imperfectly Sensed Context in Aware Environments*. Technical Report GIT-GVU-00-14, GVU Center, Georgia Institute of Technology, September 2000.
- [TR.8] D. Salber, A.K. Dey, R.J. Orr and G.D. Abowd. *Designing for Ubiquitous Computing: A Case Study in Context Sensing*. Technical Report GIT-GVU-99-29, GVU Center, Georgia Institute of Technology, July 1999.
- [TR.7] A.K. Dey, D. Salber, M. Futakawa and G.D. Abowd. *An Architecture To Support Context-Aware Applications*. Technical Report GIT-GVU-99-23, GVU Center, Georgia Institute of Technology, June 1999.
- [TR.6] A.K. Dey and G.D. Abowd. *Towards a Better Understanding of Context and Context-Awareness*. Technical Report GIT-GVU-99-22, GVU Center, Georgia Institute of Technology, June 1999.
- [TR.5] D. Salber, A.K. Dey and G.D. Abowd. *Ubiquitous Computing: Defining an HCI Research Agenda for an Emerging Interaction Paradigm*. Technical Report GIT-GVU-98-01, GVU Center, Georgia Institute of Technology, February 1998.
- [TR.4] G.D. Abowd, A.K. Dey and A. Wood. *Applying Dynamic Integration as a Software Infrastructure for Context-Aware Computing*. Technical Report GIT-GVU-97-18, GVU Center, Georgia Institute of Technology, September 1997.



- [TR.3] G.D. Abowd, A.K. Dey, R. Orr and J. Brotherton. *Context-awareness in Wearable and Ubiquitous Computing*. Technical Report GIT-GVU-97-11, GVU Center, Georgia Institute of Technology, May 1997.
- [TR.2] A.K. Dey, G.D. Abowd, M. Pinkerton and A. Wood. *CyberDesk: A Framework for Providing Self-Integrating Ubiquitous Software Services*. Technical Report GIT-GVU-97-10, GVU Center, Georgia Institute of Technology, April 1997.
- [TR.1] A.K. Dey, L.D. Catledge, G.D. Abowd and C. Potts. *Developing Voice-only Applications in the Absence of Speech Recognition Technology*. Technical Report GIT-GVU-97-06, GVU Center, Georgia Institute of Technology, February 1997.

## PRESENTATIONS

### Invited Conference Keynote

- [K.15] TBD. International Conference on Context-Aware Systems and Applications, October 2014.
- [K.14] *Persuasive Technology or Explorative Technology?* Persuasive Computing, April 2013.
- [K.13] *Smart Phone or Smartphone: Defining a New Research Agenda*. 9<sup>th</sup> Congreso Nacional y 6o Internacional de Infomatica y Sistemas Computacionales (CONAIS 2012), September 21, 2012.
- [K.12] *The Smart Phone: Why We Don't Have One and What It'll Take to Build One*. 5<sup>th</sup> International Symposium on Ubiquitous Computing and Ambient Intelligence. December 6, 2011.
- [K.11] *Intelligent Systems in an Increasingly Confusing World*. 1<sup>st</sup> International Conference on Pervasive and Embedded Computing and Communication Systems. March 7, 2011.
- [K.10] *Usable Sensor-Based Applications*. 2<sup>nd</sup> International Workshop on Web Intelligence and Virtual Enterprises. October 12, 2010.
- [K.9] *Usability and Context-Aware Systems*. International Conference on Enterprise Information Systems. June 12, 2010.
- [K.8] *Modeling and Adding Intelligibility to Human Activities*. International Symposium on Ubiquitous Virtual Reality. July 11, 2008.
- [K.7] *Modeling and Adding Intelligibility to Human Activities*. Lockheed Martin's Information Technology Trends Conference. February 20, 2008.
- [K.6] *Context-Aware Systems in the Wild*. Australian Research Council Research Network on Enterprise Information Infrastructure, Taskforce on Context-Aware Computing. Workshop on Context-Aware Computing: A Research Networking Forum. September 27, 2007.
- [K.5] *Context in Everyday Life: Challenges and Opportunities*. 3<sup>rd</sup> Workshop on Context-Awareness for Proactive Systems (CAPS 2007), June 18, 2007.
- [K.4] *End-User Control in the Smart Home*, 1<sup>st</sup> European Conference on Smart Sensing and Context. Enschede, The Netherlands. October 25, 2006.
- [K.3] *Usability in Context-Aware Applications*. 3<sup>rd</sup> International Workshop on Modeling and Retrieval of Context at AAAI 2006. July 16, 2006.
- [K.2] *Control in Ubiquitous Computing Environments*. 15th Seminario Integrado de Software e Hardware (SEMISH) at the 23rd Conference of the Brazilian Computer Society (SBC2003), Campinas, Brazil. August 4, 2003.
- [K.1] *Future Living Environments*. SISCTI XXVIII, Monterey, Mexico. March 1, 2003.

### Invited Talks

- [I.46] *Smartphones as a Resource for Understanding People*, Johannes Kepler University, Linz, Australia, February 11, 2014.
- [I.45] *Smartphones as a Resource for Understanding People*, LG Electronics, South Korea, November 4, 2013.
- [I.44] *Smartphones as a Resource for Understanding People*, University of Tampere, Finland, October 3, 2013.
- [I.43] *Smartphones as a Resource for Understanding People*, University of Sydney, Australia, April 3, 2013.
- [I.42] *Your Big Data: Where is the Value?* University of Sydney, Australia, April, 2013.
- [I.41] *A Healthy Home*, Wired Health Conference: Living By Numbers, New York, USA, October 16, 2012.

- [I.40] *The Smart Phone: Why Don't We Have One*, Google Tech Talk, Zurich, Switzerland. February 14, 2012.
- [I.40] *The Smart Phone: Why Don't We Have One*, Madeira Interactive Technologies Institute, Funchal, Portugal. February 14, 2012.
- [I.40] *The Smart Phone: Why Don't We Have One*, Swiss User Experience Special Interest Group, Zurich, Switzerland. January 26, 2012.
- [I.40] *Successes and Failures in Publishing Ubicomp Papers*, UbiComp Paper Development Workshop, Tsinghua University, Beijing, China. December 2, 2010.
- [I.40] *Challenges in Applying Context-Aware Systems to Health and Wellness*, Queensland University of Technology, Brisbane, Australia. October 5, 2007.
- [I.39] *Context-Aware Systems in the Wild*, University of Queensland, Brisbane, Australia. October 4, 2007.
- [I.38] *Context-Aware Systems in the Wild*, NICTA, Sydney, Australia. October 2, 2007.
- [I.37] *Context-Aware Systems in the Wild*, University of Sydney, Sydney, Australia. October 2, 2007.
- [I.36] *Building Context-Aware Applications*, Invited Tutorial at Pervasive 2007, Toronto, Canada. May 16, 2007.
- [I.35] *Feedback and Control in Context-Aware Systems*, Swedish Institute of Computer Science, Uppsala, Sweden. February 8, 2007.
- [I.34] *Feedback and Control in Context-aware Systems*, University of Oulu, Oulu, Finland. January 11, 2007.
- [I.33] *Feedback and Control in Context-aware Systems*, Nokia Research Center, Helsinki, Finland. January 10, 2007.
- [I.32] *End-User Control in the Smart Home*, Microsoft Research, Seattle, WA. June 2, 2006.
- [I.31] *Usability Challenges in Ubiquitous Computing*. CMU Computational Design Colloquium. Carnegie Mellon University, Pittsburgh, PA. December 1, 2005.
- [I.30] *Giving Users Control in Ubiquitous Computing Environments*. IBM USER Group, IBM Research, Almaden, CA. March 24, 2004
- [I.29] *Giving Users Control in Ubiquitous Computing Environments*. Stanford People, Computers and Design Seminar, Stanford, CA. May 21, 2004
- [I.28] *Predictions of the Future: The Ubiquitous Computing Story*. HKN Honor Society Monthly Meeting. University of California at Berkeley, Berkeley, CA. October 28, 2003.
- [I.27] *Control in Ubiquitous Computing Environments*. Graduate Seminar at the Instituto de Ciências Matemáticas e de Computação (ICMC), University of São Paulo, São Carlos, Brazil. August 6, 2003.
- [I.26] *Sensing-Based Interaction*. Intel Research Seattle Seminar Series, Seattle, WA. July 2, 2003.
- [I.25] *A Research Agenda for Ambient and Peripheral Displays*. Fuji-Xerox Palo Alto Laboratory (FX-PAL), Palo Alto, CA. February 5, 2003.
- [I.24] *Dealing with Ambiguity in Context-aware Environments*. IFIP Working Group 2.7/13.4 Meeting, Paris, France. October 31, 2002.
- [I.23] *Evaluation of Ubiquitous Computing Systems: Exercise in Frustration or a Research Opportunity*. Dagstuhl Summer School on Ubiquitous Computing. Dagstuhl, Germany. August 12, 2002.
- [I.22] *Augmenting Humans via Objects and the Environment*. Dagstuhl Summer School on Ubiquitous Computing. Dagstuhl, Germany. August 9, 2002.
- [I.21] *Building Context-aware Applications*. Dagstuhl Summer School on Ubiquitous Computing. Dagstuhl, Germany. August 7, 2002.
- [I.20] *Sensor-based User Interfaces for Ubiquitous Computing*. National Institute of Advanced Industrial Science and Technology Digital Human Laboratory, Tokyo, Japan. July 25, 2002.
- [I.19] *Informal Design in Ubiquitous Computing*. Tamagawa University, Tokyo, Japan. July 25, 2002.
- [I.18] *Sensor-based User Interfaces for Ubiquitous Computing*. IBM Tokyo Research Lab, Tokyo, Japan. July 24, 2002.
- [I.17] *Supporting the Construction of Context-Aware Applications*. Tamagawa University, Tokyo, Japan. July 24, 2002.
- [I.16] *Sensor-based User Interfaces for Ubiquitous Computing*. Sony Computer Science Laboratory, Tokyo, Japan. July 23, 2002.
- [I.15] *User Interfaces for Ubiquitous Computing*. Tamagawa University, Tokyo, Japan. July 23, 2002.

- [I.14] *User Interfaces for Pervasive Computing*. Pervasive Computing Special Interest Group, Panel on User Interfaces for Pervasive Computing, Palo Alto, CA. June 26, 2002.
- [I.13] *Ambient Interfaces for Peripheral Awareness*. Workshop on Displaying Information in Public Spaces, Berkeley, CA. June 11, 2002.
- [I.13] *Supporting the construction of context-aware applications*. Dagstuhl seminar on Ubiquitous Computing, 2001.
- [I.12] *Context-aware Computing*. Naval Postgraduate School, Monterey, CA. October 25, 2001.
- [I.11] *The Aware Home: Testbed for Context-aware Computing*. SAP Labs, Karlsruhe, Germany. January 19, 2001.
- [I.10] *The Context Toolkit: Supporting Context-aware Computing*. University of Karlsruhe: Lecture in the Winter 99/00 course on Ubiquitous Computing, Karlsruhe, Germany. January 18, 2001.
- [I.9] *The Context Toolkit: An Investigation of Context-aware Computing*. University of Maryland Human Computer Interaction Laboratory (HCIL) Fall 2000 Seminar Series, College Park, MD. November 14, 2000
- [I.8] *Context Toolkit Tutorial*. British Telecom Laboratories, Ipswich, UK. July 27, 2000.
- [I.7] *The Aware Home: Testbed for Context-aware Computing*. British Telecom Laboratories, Ipswich, UK. July 26, 2000.
- [I.6] Invited Lecture *Supporting Context-aware Applications* . British Telecom Laboratories, Ipswich, UK. July 26, 2000.
- [I.5] *The Context Toolkit: Building Context-aware Applications*. British Telecom Laboratories, Ipswich, UK. July 24, 2000.
- [I.4] *The Context Toolkit: Building Context-aware Applications*. Intel Microprocessor Research Laboratory, Beaverton, OR. April 18, 2000.
- [I.3] *The Broadband Institute Residential Laboratory: a.k.a. the Aware Home*. Intel Microprocessor Research Laboratory, Beaverton, OR. April 18, 2000.
- [I.2] *Context-aware Computing*. Motorola Science Advisory Board Associates Annual Meeting, San Diego, CA. October 1997.
- [I.1] *Emerging Technologies for the World Wide Web*. Center for Disease Control, Atlanta, GA. October 1997.

## News Articles

- [N.29] CNBC, *Google House: Tech Giant Spends Billions to Get Inside Your Home*, January 15, 2014.
- [N.29] Fast Company Design, *The Future of Technology Isn't Mobile*, May 24, 2013.
- [N.28] MIT Technology Review. *Smart Assistant Listens to You Talk, Fetches Info Automatically*, January 17, 2013.
- [N.27] GadgetsAndGizmos.com, *Augmented Reality on the Commute to Work*, December 4, 2012.
- [N.26] The Tartan, *IS major applies skills to data collection*, December 3, 2012.
- [N.25] BBC.com, *Cars turn to augmented reality*, December 2, 2012.
- [N.24] CMU, SCS, The Link, *Eyes (and fingers) on the road*, Fall 2012.
- [N.23] Wired.com, *Sensors embedded in everyday life might spot dementia earlier*, October 16, 2012.
- [N.22] Medical Device Daily, *Health apps show potential for improving healthcare*, September 26, 2012.
- [N.21] AARP Bulletin, *Technology solutions for age-related ills: Devices on the horizon aim to help Alzheimer's, dementia patients*, September 27, 2010.
- [N.20] The Tartan, CMU, *CMU joins NSF-funded initiative to research behavioral disorders*, August 30, 2010.
- [N.19] Pittsburgh Tribune-Review, *High tech helps elderly, impaired*, August 26, 2010.
- [N.18] Keystone Edge, *CMU Joins NSF Research Consortium to Create Observational Tools for Autism Research*, August 26, 2010.
- [N.17] Wall Street Journal health blog, *Tracking 'Observations of Daily Living' in Infants and the Elderly*, August 18, 2010.
- [N.16] New York Times, *A Little Black Box to Jog Failing Memory*, March 9, 2010.
- [N.15] Pittsburgh Post-Gazette, *CMU to Research Sensors to Track Elderly*, March 4, 2010.
- [N.14] IEEE Spectrum Special Report: Engineers of the New Millenium: Robots for Real. *A Helping Hand From a Robot*, (Lisa Raffensperger). October 2009. (<http://spectrum.ieee.org/static/special-report-robots-for-real>)

- [N.13] STLToday.com, *Easier-to-use high tech aims at the older set*, (Tim Barker). January 9, 2009.
- [N.12] Spirit Magazine, *The Kindness Lab*, (Mike Darling). October 2008.
- [N.11] MIT Technology Review, *Whole Body Gaming*, (Erica Noane). September 6, 2007.
- [N.10] The Economist, *The Trouble with Computers*, (Benjamin Sutherland). September 6, 2007.
- [N.9] The Chronicle of Higher Education, *On the Record, All the Time*, (Scott Carlson). February 9, 2007.
- [N.8] Pittsburgh Post-Gazette, *'Moblogging' trend makes mobile Web posting possible*, April 2, 2006.
- [N.7] India Abroad, *Lessons of Color: Have Attitudes Towards Foreign Teachers Changed for the Better*, (Shakti Dhatt). September 5, 2003.
- [N.6] The Feature, *Wireless Winemaking*, (Jeff Goldman). July 2003.  
<https://www.thefeature.com/index.jsp?url=article.jsp?pageid=45405>
- [N.5] Berkeley Engineering Lab Notes, *Ambient Displays that Don't Distract*, (David Pescovitz). May 2003. <http://www.coe.berkeley.edu/labnotes/0503/mankoff.html>
- [N.4] Wired.com, *Making Wines Finer with Wireless*, April 4, 2003.  
<http://www.wired.com/news/wireless/0,1382,58312,00.html>
- [N.3] Berkeley Engineering News, *EECS professors design 'aware chair' communication system for physically and speech-impaired*. January 20, 2003, 73 (1S).  
<http://www.coe.berkeley.edu/engnews/fall02/1S/Awarechair.html>
- [N.2] Berkeley Lab Notes, *Art, Technology, Process and Product*, (David Pescovitz). July 2002.  
<http://www.coe.berkeley.edu/labnotes/0702/tangible.html>
- [N.1] NY Times, *The To-Do List that Knows Where You Are*, (Yudhijit Bhattacharjee). November 8, 2001.

## FUNDING

### Current (Need to update)

Title: Mining, Modeling and Prediction of Human Routine Behavior Using Smartphone's Data  
 Project PI: Anind K. Dey  
 Agency: Google  
 Duration: 2014-2015  
 Amount: \$75,440

Title: An integrated visualization-based environment to provide information support for troubleshooting of HVAC related problems  
 Project PI: Semiha Ergan; Co-PI: Anind K. Dey  
 Agency: PITA  
 Duration: 2014-2015  
 Amount: \$50,000

Title: Context-Awareness and Mobile Phones  
 Project PI: Anind K. Dey  
 Agency: LG Electronics  
 Duration: 2013-2014  
 Amount: \$70,000

Title: Expeditions: Collaborative Research: Behavior Imaging: Enabling a Quantitative Science of Behavior through Computational Sensing  
 Project PI: Jim Rehg (Georgia Tech); CMU PI: Anind K. Dey  
 Agency: National Science Foundation  
 Grant No.: TBD  
 Duration: 2010-2015  
 Amount: \$1,499,518 (CMU portion) of \$10,000,000 (total awarded to team)

Title: CyberPhysical Systems: Medium: Collaborative Research: Enabling and Advancing Human and Probabilistic Context Awareness for Smart Facilities and Elder Care  
Project PI: Neal Patwari (University of Utah); CMU PI: Anind K. Dey  
Agency: National Science Foundation  
Duration: 2010-2013  
Amount: \$420,064 (CMU portion) of \$1,500,000 (total asked for team)

Title: *CAREER Award*: Supporting the Intelligibility of Context-Aware Applications, REU Supplement  
PI: Anind K. Dey  
Agency: National Science Foundation  
Grant No.: NSF-IIS-0746428  
Duration: 2008-2012  
Amount: \$16,000

Title: HCC: Small: Learning Routines to Support People's Activities  
PI: Anind K. Dey  
Agency: National Science Foundation  
Grant No.: TBD  
Duration: 2010-2013  
Amount: \$499,592

Title: SoCS: Creation of a Framework for Computational Gaming  
PI: Anind K. Dey  
Agency: National Science Foundation  
Grant No.: TBD  
Duration: 2010-2013  
Amount: \$705,000

Title: Developing Interactive Systems with Brain-Computer Interfaces  
PI: Anind K. Dey  
Agency: United Therapeutics  
Duration: 2010-2011  
Amount: \$300,000

Title: Planning and Prediction  
PI: Anind K. Dey and Drew Bagnell  
Agency: Traffic21  
Duration: 2010-2011  
Amount: \$25,000

Title: Learning Family Routines  
PI: Anind K. Dey and John Zimmerman  
Agency: Google  
Duration: 2010-2011  
Amount: \$70,000

Title: Extending Skills of Elderly Drivers through Modeling Situation Awareness  
PI: Anind K. Dey and Jodi Forlizzi  
Agency: General Motors  
Duration: 2010-2011  
Amount: \$200,000

Title: NetSE: Large: Collaborative Research: Fieldstream: Network Data Services for Exposure Biology Studies in Natural Environments  
Project PI: Santosh Kumar (University of Memphis); CMU PI: Anind K. Dey

Agency: National Science Foundation  
Grant No.: NSF-CNS-0910754  
Duration: 2009-2013  
Amount \$360,000 (CMU portion) of \$2,699,991 (total awarded to team)

Title: SINAIS - Sustainable Interaction with social Networks, context Awareness and Innovative Services  
PI: Anind K. Dey  
Agency: Information and Communication Technologies Institute (CMU-Portugal program)  
Duration: 2009-2011  
Amount: \$608,677

Title: *CAREER Award*: Supporting the Intelligibility of Context-Aware Applications, REU Supplement  
PI: Anind K. Dey  
Agency: National Science Foundation  
Grant No.: NSF-IIS-0746428  
Duration: 2008-2012  
Amount: \$12,800

Title: *CAREER Award*: Supporting the Intelligibility of Context-Aware Applications  
PI: Anind K. Dey  
Agency: National Science Foundation  
Grant No.: NSF-IIS-0746428  
Duration: 2008-2012  
Amount: \$500,000

## **Pending**

To Do

## **Past**

Title: Embedded Assessment of Elder Activities (Cognitive Decline and Arthritis) for Augmenting Personal Health Records  
PI: Anind K. Dey  
Agency: Robert Wood Johnson Foundation  
Grant No.: RWJF-67167  
Duration: 2010-2012  
Amount: \$480,000

Title: Android Phones for Learning  
PI: Anind K. Dey  
Agency: Google  
Duration: 2009-2010  
Amount: 15 HTC-G1 Android phones

Title: University of Pittsburgh Center for Advanced Study of Informatics in Public Health  
PI: Michael Wagner  
Agency: Center for Disease Control  
Grant No.: NIH-CDC-1P01HK000086-01  
Duration: 2009-2014  
Amount: \$350,867 (CMU portion) of multi-million dollar grant (total awarded to entire Center of Excellence at the University of Pittsburgh)

Title: Decision Making in Biosurveillance  
PI: Michael Wagner

Agency: National Institutes for Health  
Grant No.: NIH-NLM-5R01LM009132-02  
Duration: 2009-2013  
Amount: \$130,000 (CMU portion) of \$1,903,535 (total awarded to team)

Title: A Secure Usable Context Toolkit for Mobile Applications  
PI: Martin Griss  
Agency: CMU CyLab  
Duration: 2010-2011  
Amount: \$155,000

Title: Dual Income Families and Routines  
PI: Anind K. Dey  
Agency: Intel Research  
Duration: 2008-2009  
Amount: \$40,000

Title: Context-Awareness and Mobile Devices  
PI: Anind K. Dey  
Agency: Nokia Research  
Duration: 2008-2009  
Amount: \$10,000

Title: Usable Security and Privacy for Context-Aware Computing  
PI: Martin Griss and Anind K. Dey  
Agency: CMU CyLab  
Duration: July 2008 – June 2009  
Amount: \$150,000

Title: Intel Mobile Sensing Platform  
PI: Anind K. Dey, Jodi Forlizzi, Scott Hudson and Jennifer Mankoff  
Agency: Intel Corporation  
Amount: Intel Mobile Sensing Platform and software

Title: Activity Monitoring and Feedback to Promote Behavior Change  
PI: Anind K. Dey  
Agency: Robert Bosch Corporation  
Duration: 2008  
Amount: \$78,765

Title: Supporting Alzheimer's Patients through Memory Augmentation  
PI: Anind K. Dey  
Agency: Microsoft Research  
Duration: 2008  
Amount: \$50,000

Title: Monitoring and Feedback to Support Physical Exercise Awareness  
PI: Anind K. Dey  
Agency: Nokia Research  
Duration: 2007-8  
Amount: \$7,840

Title: Monitoring and Feedback to Support Physical Exercise Awareness  
PI: Anind K. Dey  
Agency: Nokia Research  
Duration: 2007-8

Amount: 15,000 Euros and Nokia phones and GPS hardware

Title: Monitoring and Feedback to Support Physical Exercise Awareness

PI: Anind K. Dey and Jodi Forlizzi

Agency: Pennsylvania Department of Health

Grant No.: PA DOH 4100031272

Duration: 2006-7

Amount: \$100,486

Title: Monitoring and Feedback to Support Physical Exercise Awareness

PI: Anind K. Dey and Jodi Forlizzi

Agency: Pennsylvania Infrastructure Technology Alliance

Grant No.: FY06-H PITA\_ICES

Duration: 2006-7

Amount: \$52,200

Title: Supporting Alzheimer's Patients Through Memory Augmentation

PI: Anind K. Dey

Agency: Microsoft Research

Duration: 2005-2006

Amount: SenseCam equipment and software

Title: *ITR Award*: Human-Centered Design of Context-Aware Computing: Scalability, Usability and Privacy

PI: James Landay, Anind K. Dey and Jennifer Mankoff

Agency: National Science Foundation

Grant No.: NSF-IIS-0205644

Duration: 2002-2007

Amount: \$2,312,000

Notes: 15% of submitted proposals funded.

Title: ICT4B – A Scalable Enabling IT Infrastructure for Developing Countries

PI: Eric Brewer, Jennifer Mankoff, Steven Weber, Jan Rabaey and Vivek Subramanian

Role: Senior Personnel

Agency: National Science Foundation

Grant No.: NSF-EIA-0326582

Duration: 2003-2008

Amount: \$3,420,000

Notes: 10% of submitted proposals funded.

Title: Tangible Instant Messaging for the Elderly.

PI: Anind K. Dey and Margaret Yau

Agency: University of California at Berkeley Haas Scholars Program

Duration: 2002

Amount: \$1,500

Title: Healthy Cities Ambient Display

PI: Anind K. Dey and Morgan Ames

Agency: University of California at Berkeley David Scholars Program

Duration: 2002

Amount: \$4,000

Title: Ambient Displays

PI: Anind K. Dey and Jennifer Mankoff, for Chinmayi Bettadapur and Morgan Ames

Agency: Computing Research Association's (CRA) Collaborative Research Environment for Women (CREW)



Duration: 2002  
Amount: \$2,000

Title: Computing in the Home  
PI: Anind K. Dey and Gregory D. Abowd  
Agency: State of Georgia's Broadband Telecommunications Center  
Duration: 1999  
Amount: \$10,000

## **SERVICE**

### **Conference Committee Activities (including Program Chair positions)**

2012 UbiComp 2012 General Chair  
2010 AutomotiveUI 2010 Conference Co-Chair  
2009 AutomotiveUI 2009 Conference Co-Chair  
2008 PerCom 2008 Program Vice-Chair  
2007 Mobiquitous 2007 Program Co-Chair; EUSAI 2007 Program Vice-Chair; Pervasive 2006 Workshop Chair  
2005 CONTEXT 2005 Program Co-Chair, Demonstrations Chair; Pervasive 2005 Doctoral Colloquium Chair  
2003 CHI 2003 Demonstrations Co-Chair; UBICOMP 2003 Program Chair; ICMI 2003 Registration Chair  
2002 UBICOMP 2002 Doctoral Consortium Chair  
2001 UBICOMP 2001 Technical Notes and Workshop Chair  
1999 ACM UIST '99 Student Volunteer Chair

### **Editorial Positions**

2012 – present ACM Sigmobility RockStar Award Selection Committee  
2011 – present Editorial board for MDPI Computers Journal  
2011 – present Co-editor, IEEE Pervasive & columnist of Pervasive Health column  
2009 – 2010 Co-editor, IEEE Pervasive & columnist of Applications column  
2008 – present Editorial Board, International Journal on Mobile HCI  
2007 – present Advisory Board, Ambient Intelligence and Smart Environments Journal, Springer-Verlag  
2007 – present Editorial Board, Book Series on Ambient Intelligence and Smart Environments, Springer-Verlag  
2006 – present Editorial Board, International Journal of Smart Home, Security Engineering Research Support Center  
2005 – present Steering Committee, CONTEXT conference series  
2003 – 2009 Steering Committee, UBICOMP conference series  
2001 – present Co-editor, Personal and Ubiquitous Computing Journal, Springer-Verlag

### **Program Committee Member**

2014: Pervasive Health 2014

2011:

CHI 2011 SubCommittee Co-Chair for Technology, Systems and Tools committee  
International Conference on Mobile Computing, Applications, and Services (MobiCase)  
Pervasive Health 2011

2010:

International Conference on Pervasive Computing 2009  
UbiComp 2010  
Workshop on What can the Internet of Things do for the citizen?  
CSCW 2010  
International Symposium on Ubiquitous Virtual Reality  
MobileHCI 2010

International Workshop on Programming Methods for Mobile and Pervasive Systems  
Juror for 1<sup>st</sup> International Open Ubiquitous City Challenge, Oulu, Finland

2009:  
CHI 2009 Full Papers  
Symposium on Location and Context-Awareness

2008:  
CHI 2008 Full Papers  
Workshop on Context-Aware Pervasive Communities: Infrastructures, Services and Applications  
International Conference on Pervasive Computing 2008  
Fourth International Workshop on Context and Ontology 2008  
3<sup>rd</sup> Workshop on Artificial Intelligence Techniques for Ambient Intelligence  
Workshop on Location and Context-Awareness  
International Symposium on Ubiquitous Virtual Reality

2007:  
CHI 2007 Full Papers  
2<sup>nd</sup> Workshop on Artificial Intelligence Techniques for Ambient Intelligence  
1<sup>st</sup> IEEE International Symposium on Ubiquitous Computing and Intelligence  
2<sup>nd</sup> International Workshop on Trustworthiness, Reliability and services in Ubiquitous and Sensor networks  
6<sup>th</sup> International Conference on Mobile Business  
International Advisory Board for 2007 Conference on Future Generation Communication and Networking  
International Conference on Intelligent Pervasive Computing  
Workshop on Location and Context-Awareness  
UbiComp 2007

2006:  
Workshop on Multi-Channel Adaptive Context-Sensitive (MAC) Systems: Building Links Between Communities  
3rd International Workshop on Modeling and Retrieval of Context  
1st Workshop on Artificial Intelligence Techniques for Ambient Intelligence  
Workshop on Location and Context-Awareness  
MobiQuitous 2006: 3rd Annual Conference on Mobile and Ubiquitous Systems: Networks and Services  
International Conference on Pervasive Computing 2006  
3rd International Symposium on Ubiquitous Computing Systems  
Workshop on Wireless Security and Privacy  
Second International Workshop on Contexts and Ontologies: Theory, Practice and Applications  
3rd International Workshop on Tangible Space Initiative  
Workshop on Security Services in Ubiquitous Environments  
Smart Home Session at the International Conference on Hybrid Information Technology  
Workshop on Software Engineering Challenges in Ubiquitous Computing  
International Conference on Ubiquitous Convergence Technology  
Workshop on Personalized Context Modeling and Management for ubiComp Applications  
1<sup>st</sup> International Workshop on Trustworthiness, Reliability and services in Ubiquitous and Sensor networks

2005:  
European Conference on Computer-Supported Cooperative Work 2005  
European Symposium on Smart Objects and Ambient Intelligence  
Intelligent User Interfaces 2005  
Workshop on Location and Context-Awareness  
World Wide Web Conference 2005  
2nd International Workshop on Modeling and Retrieval of Context  
1st International Workshop on Exploiting Context Histories in Smart Environments  
2nd International Workshop on Software Aspects of Context

2004:

Graphics Interface 2004  
International Conference on Pervasive Computing 2004  
2<sup>nd</sup> European Symposium on Ambient Intelligence

2003:

4th International Interdisciplinary Conference on Modeling and Using Context (CONTEXT 2003)  
1st International Conference on Appliance Design  
1st International Workshop on Wireless Security and Privacy  
CHI 2003 short papers and interactive posters  
User Modeling 2003 Workshop on User Modeling in Ubiquitous Computing;  
UBICOMP 2003  
UIST 2003 Demonstrations  
OZCHI 2003  
1st International Workshop on Software Aspects of Context

2002:

2nd ACM International Workshop on Mobile Commerce, 2002  
UIST 2002  
UBICOMP 2002

2001:

User Modeling 2001 Workshop on User Modeling for Context-Aware Applications

## **Reviewer: Conferences, Workshops and Journals**

2010:

CHI 2010  
Pervasive Health 2010  
UIST 2010  
ISWC 2010  
ISMAR 2010

2009:

Intelligent User Interfaces 2009  
International Symposium on End-User Development 2009  
Engineering Interactive Computing Systems  
*IEEE Transactions on Pattern Analysis and Machine Intelligence*

2008:

16<sup>th</sup> European Conference on Information Systems  
CSCW 2008  
UIST 2008  
UbiComp 2008  
*Journal of Artificial Intelligence for Engineering Design, Analysis and Manufacturing*  
*HCI Journal*  
*Transactions on Systems, Man, and Cybernetics*  
*ACM ToCHI*  
*IEEE Pervasive*  
*Springer Book Series*  
*IEEE Transactions on Information Technology in BioMedicine*

2007:

Graphics Interface 2007  
International Conference on Pervasive Computing 2007  
*IEEE Pervasive*  
*Pervasive and Mobile Computing*  
*Transactions on Parallel and Distributed Systems*

2006:

CHI 2006 full papers and technical notes  
UIST 2006  
CSCW 2006 full papers, posters  
UbiComp 2006  
International Workshop on Smart Homes  
*ACM TOCHI*

2005:  
Pervasive 2005 full papers and short papers  
CHI 2005 full papers, short papers and doctoral consortium  
UBICOMP 2005  
GROUP 2005  
InfoVis 2005  
ISWC 2005  
*IEEE Pervasive*

2004:  
UBICOMP 2004 full papers and posters  
CHI 2004 full papers, tutorials, short papers and doctoral consortium  
ISWC 2004  
InfoViz 2004  
Workshop on Multi-User and Ubiquitous User Interfaces  
*Multimedia Tools and Applications*  
*IEEE Security and Privacy*

2003:  
UIST 2003  
UBICOMP 2003  
CHI 2003 full papers, student posters and tutorials;  
MobiSys 2003  
HCI 2003 short papers  
InfoViz 2003  
INTERACT 2003 full papers and posters  
ISWC 2003  
SENSYS 2003  
OzCHI 2003  
*IEEE Pervasive*  
*ACM Mobile Computing and Communications Review*  
*IEEE Transactions on Mobile Computing*  
*ACM Transactions on Software Engineering and Methodology*  
*ACM Transactions on Computer-Human Interaction*  
*Applied Artificial Intelligence*  
*Software Process Improvement and Practice*

2002:  
Pervasive Computing  
CSCW 2002  
UIST 2002  
UBICOMP 2002  
CHI 2002  
*IEEE Pervasive*

2001:  
UIST 2001  
UBICOMP 2001  
HCII 2001  
CHI 2001

2000:  
UIST 2000  
HUC2K

1999:

UIST 1999

## **Mentor Programs**

2009 – present Co-mentor for Dr. Judith Callan, University of Pittsburgh, Multidisciplinary Clinical Research Scholars Program [C.67]  
2007 – present QoLT/HERL REU program  
2007 – 2008 CRA CREU  
2006 – present CMU URO program  
2006 – present CMU Undergraduate Research Office: SURF, SURG, IFYRE  
2006 CMU HCI Undergraduate project group  
2006 Mentored CMU HCII's ACM CHI Student Design Competition Team  
2004 ACM CHI 2004 full papers  
2003 – 2004 University of California at Berkeley Haas Scholars Program  
2003 ACM CHI 2003 full papers  
2002 – 2004 University of California at Berkeley Undergraduate Research Opportunities (URO) Program; University of California at Berkeley Undergraduate Research Apprentice Program (URAP)  
2002 – 2003 CRA CREW; University of California at Berkeley SUPERB (undergraduate REU program); University of California at Berkeley David Scholars Program; Intel Undergraduate Research Award  
2002 CRA-W DMAP  
1997 – 2000 Office of Naval Research intern program; Mentor for internal Georgia Tech PhD program  
1997 – 2000 Ph.D. Mentor for National Science Foundation Fellowship winners

## **Committee and University Service**

2009-present CMU HCII PhD Director  
2009-present CMU HCII Curriculum Committee  
2009 CMU HCI PhD Open House  
2009-2010 CMU Semiconductor Research Corporation Undergraduate Research Opportunities selection committee  
2008 CMU HCII PhD Admissions Committee  
2007-present CMU HCII Representative to the Faculty Senate  
2007 CMU HCII PhD Admissions Committee  
2006-present CMU Institutional Review Board (IRB) Expedited Review Team  
2005 CMU HCII Faculty Recruiting; CMU HCII Curriculum (partial service working on revamping 610, 630, and 631  
2004 Intel Research Berkeley Hiring; Intel Research Berkeley Seminar Series  
2003—2004 Intel Research Sub-Committee on User Interface Research

## **CONSULTING**

2013-present Qupiron Advisory Board  
2009-2010 United Therapeutics, 4 days/month  
2006–2008 Panthaen, Inc., 1 day/month  
2005 Andrew Field, 2 days/year  
2005 Wireless 5D, 3 days/year  
2004 AITEK, 4 days/year