

Sunyoung Kim

Assistant Professor
Department of Library & Information Science
School of Communication & Information
Rutgers University, the State University of New Jersey

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CURRENT EMPLOYMENT

Rutgers University, the State University of New Jersey

2016 - Present **Assistant Professor**, Department of Library and Information Science
Associate Faculty, Department of Computer Science
Associate Faculty, School of Arts and Sciences

RESEARCH INTERESTS

Human-Computer Interaction, Ubiquitous computing, Technology for Health care, Everyday wellbeing & Environmental sustainability

Application areas: Chronic healthcare, Everyday health and wellbeing, Healthy aging, Citizen science, Technology empowerment, Environmental sustainability, Community wellbeing

EDUCATION AND PROFESSIONAL PREPARATION

- 2014-2016 Postdoctoral fellow, Center for Research on Computation and Society
John A. Paulson School of Engineering and Applied Sciences
Harvard University, Cambridge, MA, USA
Advisors: *Krzysztof Z. Gajos & Barbara J. Grosz*
- 2014 Ph.D. in Human-Computer Interaction
Human-Computer Interaction Institute, School of Computing
Carnegie Mellon University, Pittsburgh, PA, USA
Committee: *Eric Paulos* (co-chair), *Jennifer Mankoff* (co-chair), *Niki Kittur*, *Jason Ellis*
Thesis: *"SENSR: a flexible framework for authoring mobile data-collection tools for citizen science"* (C.8, C.10)
- 2008 M.S. in Human-Computer Interaction
School of Computing
Georgia Institute of Technology, Atlanta, GA, USA
Advisor: Gregory Abowd
Thesis: *"Are you sleeping?: sharing portrayed sleeping status within a social network"* (C.1)
- 2000 B.S. in Architecture & Housing and Interior Design
Yonsei University, Seoul, Korea

PROFESSIONAL EXPERIENCES

- 2016 - Present Assistant professor
Department of Library & Information Science
School of Communication & Information
Rutgers University
- 2008-2014 Carnegie Mellon University, Pittsburgh, PA, USA
Research Assistant, Human-Computer Interaction institute
- Summer 2010 IBM Research Almaden, CA, USA
Research Intern, Mobile computing group
Project: Creek Watch, a mobile application for citizen water monitoring
Supervisor: *Jeff Pierce*
- Summer 2008 Intel Research Seattle, WA, USA
Research Intern
Project: Carubi, tracking, optimizing and predicting daily driving patterns
Supervisor: *Daniel Avrahami*
- 2007-2008 Georgia Institute of Technology, Atlanta, GA, USA
Research Assistant, School of Interactive Computing
- Fall 2006 Georgia Institute of Technology, Atlanta, GA, USA
Research Assistant, College of Architecture
- 2003-2006 Daum Communications, Seoul, Korea
Assistant Manager, Search Portal Division
- 2000-2003 CVNet, Samsung Corp. Seoul, Korea
Interaction Designer, Intelligent Apartment Team

HONORS & AWARDS

- 2014 An invited participant at the Rising Stars in EECS, University of California, Berkeley
- 2013 A selected participant at the Human Computer Interaction Symposium
- 2011 IBM Research Graduate Fellowship
- 2008 University of California, Irvine, Dean's Fellowship (Declined)
- 1998 Rotary scholarship, Korea

PUBLICATIONS

- Under review U.3 Kim, S., Iravanchi, Y., Gajos, K. Z., & Grosz, B. (2017). SwellFit: A Wearable Sensor for Monitoring Pedal Edema
- U.2 Kim, S. (2017). Bridging the Gap between Health Informatics and HCI: A Comparative Review of Human Subject Studies in Healthcare Technology using Text Mining
- U.1 Li, N., Gajos, K. Z., Ogan, A., Enos, R., Kim, S., and Nayakama, K. (2017). Enhancing Student Engagement With Hands-on Classroom Demonstrations in HCI and Social Science Classes
- Peer-Reviewed Conference Papers C.11 Kim, S., Gajos, K. Z., Grosz, B., & Muller, M. (2016). Acceptance of Consumer Health Technologies by Older Adults. In Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services, MobileHCI '16, pages 147-157, New York, NY, USA, 2016. ACM.

C.10 Kim, S., Mankoff, J., & Paulos, E. (2015). Exploring Barriers to the Adoption of Mobile Technologies for Volunteer Data Collection Campaigns. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 3117-3126). ACM [Acceptance rate: 23%]

C.9 Kim, S., Paulos, E. & Mankoff, J. (2013) inAir: a longitudinal study of indoor air quality measurements and visualizations, In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 2745-2754). ACM [Acceptance rate: 20%]

C.8 Kim, S., Mankoff, J., & Paulos, E. (2013). Sensr: evaluating a flexible framework for authoring mobile data-collection tools for citizen science. In Proceedings of the 2013 conference on Computer supported cooperative work (pp. 1453-1462). ACM. [Acceptance rate: 35.6%]

C.7 Kim, S., Robson, C., Zimmerman, T., Pierce, J., & Haber, E. M. (2011). Creek watch: pairing usefulness and usability for successful citizen science. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 2125-2134). ACM. [Acceptance Rate: 26%]

C.6 Kim, S., & Paulos, E. (2011). Practices in the creative reuse of e-waste. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 2395-2404). ACM. [Acceptance Rate: 26%]

C.5 Kim, S., & Paulos, E. (2010). InAir: sharing indoor air quality measurements and visualizations. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp. 1861-1870). ACM. [Acceptance Rate: 22%]

C.4 Kim, S., Paulos, E., & Gross, M. D. (2010). WearAir: expressive t-shirts for air quality sensing. In Proceedings of the fourth international conference on Tangible, embedded, and embodied interaction (pp. 295-296). ACM. [Acceptance Rate: 34%]

C.3 Kim, S., & Paulos, E. (2009). Listening to air quality. In Proceedings of the First international conference on Expressive Interactions for Sustainability and Empowerment (pp. 9-9). British Computer Society.

C.2 Kim, S., & Paulos, E. (2009). inAir: measuring and visualizing indoor air quality. In Proceedings of the 11th international conference on Ubiquitous computing (pp. 81-84). ACM. [Acceptance Rate: 12.9%]

C.1 Kim, S., Kientz, J. A., Patel, S. N., & Abowd, G. D. (2008). Are you sleeping?: sharing portrayed sleeping status within a social network. In Proceedings of the 2008 ACM conference on Computer supported cooperative work (pp. 619-628). ACM. [Acceptance Rate: 23%]

Book Chapter Paulos, E., Kim, S., & Kuznetsov, S. (2010). “The Rise of the Expert Amateur: Citizen Science and Micro –Volunteerism”, chapter contribution in From Social Butterfly to Engaged Citizen. Edited by Marcus Foth, MIT Press, 2010

Doctoral Consortium Kim, S. (2012). A flexible tool for participating, authoring, and managing citizen science campaigns on-the-go. In Proceedings of the 2012 ACM Conference on Ubiquitous Computing (pp. 556-559). ACM.

Extended Abstracts E.2 Kim, S., Mankoff, J. & Paulos, E. (2014). Exploring the Opportunities of Mobile Technology Use in Nonprofit Organizations. In CHI'14 Extended Abstracts on Human Factors in Computing Systems. ACM.

E.1 Kim, S., & Paulos, E. (2012). A subscription-based authoring tool for mobile citizen science campaigns. In CHI'12 Extended Abstracts on Human Factors in Computing Systems (pp. 2135-2140). ACM.

Workshop Papers and Others W.9 Kim, S., Iravantchi, Y., Gajos, K. Z., & Grosz, B. (2015). Exploring Opportunities for Social Infrastructure in Congestive Heart Failure Management. CSCW 2015 Workshop on Moving Beyond e-Health and the Quantified Self, Vancouver, BC, Canada, 2015.

- W.8 Kim, S., Mankoff, J., & Paulos, E. (2014). Reflecting the Current Practices of Technology Use in Volunteer Data Collection Activities on the Opportunities of Mobile Technology. Technical Report, CMU-HCII-14-107, Carnegie Mellon University.
- W.7 Kim, S. (2013). E-waste: Repair or Replace? That is the Question. Human Computer Interaction Consortium, Monterey, CA, USA
- W.6 Kim, S. (2013). Sustainable Reusability in the Rise of Electronic Waste. CHI 2013 Workshop on Reclaiming Repair, Paris, France, 2013.
- W.5 Kim, S. (2013). Technology to empower citizen scientists, The U.S. Environmental Protection Agency, Kentucky, USA, 2013.
- W.4 Kim, S. (2011). Environmental inference: using activity inference as a way to collect environmental data for urban health, CHI 2011 workshop on Data collection by the people for the people, Vancouver, BC, Canada, 2013.
- W.3 Kim, S., & Paulos, E. (2010). Understanding e-Waste: How to Encourage Re-use and Longevity-of-use of Domestic e-Waste, CHI 2010 Workshop on Examining appropriation, re-use and maintenance for sustainability, Atlanta, Georgia, USA, 2010.
- W.2 Kim, S., & Paulos, E. (2009). Building a simple, low-cost air quality sensor for monitoring indoor air quality, CHI 2009 Workshop of DIY for CHI: methods, Communities and values of reuse and customization, Boston, Massachusetts, USA, 2009.
- W.1 Kim, S. (2008), Richardson, J., Arriaga, R., & Abowd, G. D. Digital Picture Schedule: An Everyday Activity sharing Tool for parents of Children with Autism.

TEACHING EXPERIENCES

- Fall 2010 Teaching Assistant
HCI 540 – Human-Computer Interaction Methods with Professor Bonnie John & Matthew Kam
- Spring 2010 Teaching Assistant
HCI 650 – Basic Interaction Design with Professor Eric Paulos
- 2014 Mentor, Yasha Iravantchi (Harvard undergrad)
- 2012 Mentor, Vishal Agarwal (CMU undergrad)
- 2009 Mentor, Paul Shen (CMU undergrad)
- 2007 Mentor, Hyorim Park (Gatech undergrad)

INVITED TALKS

- November 2015 “Personal Sensing and Feedback devices towards Healthy and Environmentally Sustainable Behaviors” at the Harvard School of Engineering and Applied Science, Harvard
- Fall 2014 “Democratizing Mobile Technology in Support of Volunteer Activities in Data Collection” at the Rising Starts in EECS workshop
- Fall 2014 “Sensing and Feedback for Healthy and Environmentally Sustainable Behaviors” at Berkeley Institute of Design Seminar, University of California, Berkeley
- Fall 2013 “Citizen Science: A mobile tool for promoting citizen’s engagement in solving real-world problems” at HCI – Environment, Technology and Society By Jennifer Mankoff
- April 2013 “Technology to empower citizen scientists” at The U.S. Environmental Protection Agency, Kentucky, USA
- September 2010 “Creek Watch: pairing usefulness and usability for successful citizen science” at IBM Workshop for Frontiers of Cloud Computing

IN THE PRESS

- June 2013 Water-technology.net Smarter water for crowded cities, <http://www.water-technology.net/features/featureibm-smarter-water-project-smart-cities>
- November 2010 Forbes IBM Launches iPhone App For Crowdsourcing Water Quality, <http://www.forbes.com/sites/kerryadolan/2010/11/04/ibm-launches-iphone-app-for-crowdsourcing-water-quality/>
- September 2010 Huffpost Tech Citizen Science: Check out IBM's Creek Watch iPhone App, http://www.huffingtonpost.com/2010/09/24/citizen-science-check-out_n_738220.html
- August 2010 ABC Local Scientists use iPhone app to collect creek data, http://abclocal.go.com/kfsn/story?section=resources/lifestyle_community/green&id=7639420

ACADEMIC SERVICES

- Conference CHI
Reviewing CSCW
Ubicomp
Mobile HCI
TEI
Creativity & Cognition
Pervasive Computing
DPPI
APCHI
- Journal Reviewing Transaction on Computer Human Interaction
IEEE Pervasive Computing
IEEE Internet Computing
Indoor and Built Environment
Media Psychology
- Student CSCW 2013
volunteering CHI 2009