# **SUNYOUNG KIM** | CURRICULUM VITAE

Ph.D. Candidate Human-Computer Interaction Institute School of Computer Science Carnegie Mellon University 5000 Forbes Avenue Pittsburgh, PA 15213 Sunyoung.kim@cs.cmu.edu http://www.cs.cmu.edu/~sk1

#### **EDUCATION**

expected Ph.D. in Human-Computer Interaction

Summer Human-Computer Interaction Institute, School of Computing

<sup>2014</sup> 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"

2008 M.S. in Human-Computer Interaction

School of Interactive 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 Housing and Interior Design & Architecture

Yonsei University, Seoul, Korea

#### RESEARCH INTERESTS

Ubiquitous computing, Mobile computing, Social computing, CSCW, Crowdsourcing, Citizen Science, Sustainability, Everyday health and wellbeing

#### PROFESSIONAL EXPERIENCES

2008- Carnegie Mellon University, Pittsburgh, PA, USA

Present Research Assistant, Human-Computer Interaction institute

Summer IBM Research Almaden, CA, USA

2010 Research Intern, Mobile computing group

Project: Creek Watch, a mobile application for citizen water monitoring

Supervisor: Jeff Pierce

Summer Intel Research Seattle, WA, USA

2008 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

2002-2003 Neogenis, Seoul, Korea

Interaction Designer, HCI Consulting Team

2000-2002 **CVNet, Samsung Corp.** Seoul, Korea

Interaction Designer, Intelligent Apartment Team

#### **PUBLICATIONS**

Journal

<u>Kim, S.</u>, Paulos, E. & Mankoff, J. (2014) Exploring the Opportunities of the Adoption and Use of Mobile Technology to Promote Public Participation in Small Nonprofit Organizations (Under review)

#### Peer-Reviewed Conference Papers

- C.9 <u>Kim, S.</u>, 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 <u>Kim, S.</u>, 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 <u>Kim, S.</u>, 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 <u>Kim, S.</u>, & 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 <u>Kim, S.</u>, & 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 <u>Kim, S.</u>, 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 <u>Kim, S.</u>, & 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 <u>Kim, S.</u>, & 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 <u>Kim, S.</u>, 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%]

Chapters

Paulos. E., <u>Kim. S.</u>, & 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

<u>Kim, S.</u> (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 E.1 Abstract

- E.1 <u>Kim</u>, 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.2 <u>Kim, S.</u>, & 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.7 <u>Kim, S.</u> (2013). E-waste: Repair or Replace? That is the Question. Human Computer Interaction Consortium, Monterey, CA, USA
- W.6 <u>Kim, S.</u> (2013). Sustainable Reusability in the Rise of Electronic Waste. CHI 2013 Workshop on Reclaiming Repair, Paris, France, 2013.
- W.5 <u>Kim, S.</u> (2013). Technology to empower citizen scientists, The U.S. Environmental Protection Agency, Kentucky, USA, 2013.
- W.4 <u>Kim, S.</u> (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 <u>Kim, S.</u>, & 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 <u>Kim, S.</u>, & Paulos, E. (2009). Building a simple, low\(\text{low}\) 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 <u>Kim, S.</u> (2008), Richardson, J., Arriaga, R., & Abowd, G. D. Digital Picture Schedule: An Everyday Activity sharing Tool for parents of Children with Autism.

## **PROFESSIONAL WORKS**

2003-2006 Information Architecture & Web Usability Projects, Daum Communications

Implemented search portal usability test-bed

Designed and implemented search advertisement systems

Designed and implemented cost-per-click search marketing products

2002-2003 Mobile Interface Developments, Neogenis

Designed user Interfaces for Motorola mobile phones
Designed user Interfaces for LG networked home appliances
Consulted mobile phone usability for wireless networking

2000-2002 **Ubiquitous Housing Appliance Developments**, Samsung Corporations

Designed and deployed a touch screen based home automation system
Designed and deployed built-in, power-line based home-appliance control systems
Designed and implemented on-line communities for Samsung apartment residents

#### **TEACHING EXPERIENCE**

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

- Mentor, Vishal Agarwal (CMU undergrad)
   Mentor, Paul Shen (CMU undergrad)
- 2007 **Mentor**, Hyorim Park (Gatech undergrad)

#### **HONORS & AWARDS**

- 2011 IBM Research Graduate Fellowship
- 2008 University of California, Irvine, Dean's Fellowship (Declined)
- 1998 Rotary scholarship, Korea

#### **INVITED TALKS**

- 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 "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 Forbes IBM Launches iPhone App For Crowdsourcing Water Quality.
- November 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 Huffpost Tech Citizen Science: Check out IBM's Creek Watch iPhone App,
  - 2010 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 2014, 2013, 2012, 2011, 2010 Reviewing Ubicomp 2013, 2012, 2011, 2010

Mobile HCI 2013, 2012

TEI 2011, 2010

Pervasive Computing 2011

DPPI 2013 APCHI 2012 CSCW 2011

Journal IEEE Pervasive Computing
Reviewing IEEE Internet Computing

Student CSCW 2013 volunteers CHI 2009

# **REFERENCES**

#### **Eric Paulos**

Assistant Professor, the Berkeley Center for New Media Electrical Engineering Computer Science Department University of California, Berkeley paulos@berkeley.edu

#### Jennifer Mankoff

Associate Professor, Human-Computer Interaction Institute School of Computer Science Carnegie Mellon University jmankoff@cs.cmu.edu

#### **Gregory D. Abowd**

Distinguished Professor School of Interactive Computing Georgia Institute of Technology abowd@gatech.edu

# Jeff Pierce

Principal Engineer, UX Innovations Lab Samsung Electronics j.pierce@samsung.com