

Jennifer G. Kim

University of Illinois at Urbana-Champaign
Department of Computer Science

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RESEARCH INTERESTS

Human-Computer Interaction (HCI), Social Computing, Crowdfunding, Health Informatics

EDUCATION

University of Illinois at Urbana-Champaign, Urbana-Champaign, Illinois Aug 2012 – Present
Ph.D. Student in Department of Computer Science
Advised by Dr. Karrie Karahalios

Georgia Institute of Technology, Atlanta, Georgia Aug 2010 – May 2012
M.S. Computer Science (specialization in HCI)
Advised by Dr. Gregory Abowd and Dr. Rosa Arriaga

Soongsil University, Seoul, Korea Mar 2006 – June 2010
B.S. Engineering in Computer Science

PUBLICATIONS

Archived Conference Proceedings

- The Power of Collective Endorsements: Credibility Factors in Medical Crowdfunding Campaigns
Jennifer G. Kim, Ha Kyung Kong, Karrie Karahalios, Wai-tat Fu, and Hwajung Hong | CHI 2016
- Labor Saving and Labor Making of Value in Online Congratulatory Messages.
Jennifer G. Kim, Stephany Park, Karrie Karahalios, and Michael Twidale | SocInfo 2015
- Visual Analysis of Relationships between Behavioral and Physiological Sensor Data.
Jennifer G. Kim, Melinda Snodgrass, Mary Pietrowicz, and Karrie Karahalios | ICHI 2015
- Investigating the Use of Circles in Social Networks to Support Independence of Individuals with Autism.
Hwajung Hong, Svetlana Yarosh, **Jennifer G. Kim**, Gregory Abowd, and Rosa Arriaga | CHI 2013
- Designing a Social Network to Support the Independence of Young Adults with Autism
Hwajung Hong, **Jennifer G. Kim**, Gregory Abowd, and Rosa Arriaga | CSCW 2012
- Entertaining Education: User Friendly Cutting Interface for Digital Textbooks
Jennifer G. Kim, Hyunrok Yang, Kyungkyu Kang, and Dongho Kim | ICEC 2010

Posters and Presentations

- BEDA: Visual Analytics for Behavioral and Physiological data
Jennifer G. Kim, Melinda Snodgrass, Mary Pietrowicz, Karrie Karahalios, and Jim Halle
| VAHC 2013
- Social Mirror: Motivate Young Adults with Autism to Practice Life Skills in a Social World
Hwajung Hong, **Jennifer G. Kim**, Gregory Abowd, and Rosa Arriaga | CSCW Videos 2012
- A Specialized Social Networking Service to Promote the Independence of Young Adults with Autism
Hwajung Hong, **Jennifer G. Kim**, Gregory Abowd, and Rosa Arriaga | IMFAR 2012
- Developing Scripts to Teach Social Skills: Can the Crowd Assist the Author?
Fatima Boujarwah, **Jennifer G. Kim**, Rosa Arriaga, and Gregory Abowd | AAAI 2011
- Building a Knowledge Base to Support the Authoring of Social Skills Instructional Modules
Fatima Boujarwah, **Jennifer G. Kim**, Rosa Arriaga, and Gregory Abowd | IMFAR 2011

AWARDS AND SCHOLARSHIPS

NSF Travel Award (Oct 2015)

ICHI Conference (Award Amount: \$450)

Soongsil Fellowship (Feb 2013)

Soongsil University (Award Amount: \$10,000)

Marshall D. Williamson Fellowship (April 2012)

Georgia Institute of Technology

College of Computing Annual Award for Outstanding Master Student (Award Amount: \$4,000)

Donald V. Jackson Fellowship (April 2011)

Georgia Institute of Technology

College of Computing Annual Award for Outstanding Master Student (Award Amount: \$1,000)

Full Undergraduate Scholarship (Feb 2006 – July 2010)

Soongsil University

Creative Engineering Design Contest, 2nd prize (June 2007)

Soongsil University

RESEARCH EXPERIENCE

Visual Analytics for Behavioral Events and Sensor Signal

Fall 2012- Present

Research Assistant, advised by Dr. Karrie Karahalios, University of Illinois at Urbana-Champaign

- Conducted a participatory design study with behavioral scientists to understand difficulties they encounter when incorporating the sensor data analysis into their behavioral analysis procedure.
- Designed and developed a visual analytic tool that concurrently presents video, behavioral analysis results, sensor signal, and sensor signal analysis results in a single timeline to highlight patterns between the analyses.
- Analytic algorithm results are overlaid onto the visualized data streams, enabling scientists to experiment with different analyses and parameters.

Uncovering Changing Trends of Interactions via Facebook Birthday Posts

Fall 2012- Present

Research Assistant, advised by Dr. Karrie Karahalios, University of Illinois at Urbana-Champaign

- Designed and developed a web visualization for presenting longitudinal trends of received birthday posts and interactions (comments and likes) to the posts over the last five years.
- Statistically analyzed the trends of total number and linguistic features of birthday posts, and interactions (comments and likes) to the posts over the last five years.
- Conducted interviews to uncover reasons for the changing trends.

Social Mirror:

Spring 2011- Spring 2012

Social Network Support for the Independence of Young Adults with Autism

Research Assistant, advised by Dr. Gregory D. Abowd and Dr. Rosa Arriaga, Georgia Institute of Technology, Atlanta, GA

- Proposed a design of technology that allows individuals with autism to seek advice from a trusted social network and fosters collaboration among a group of caregivers.
- Conducted seven semi-structured Interviews with 13 caregivers to gather design requirements.
- Developed an android mobile application that allows users to seek advice from a trusted social network connected to an online social network (Facebook).
- Conducted both homogenous and heterogeneous focus group interviews with individuals with autism and their caregivers for formative evaluation of the Social Mirror prototype.

Mood Player: Facial Expression and Gesture Controlled Music Player

Fall 2011

Advised by Dr. Keith Edwards, Georgia Institute of Technology, Atlanta, GA

- Developed a music player that plays music based on user's facial expressions and gestures.

- Implemented the music player in C# and captured the user's facial expressions and gestures using Microsoft Kinect.

Interactive Digital Textbook (Fall2010 - Spring 2010)

Advised by Dr. Dongho Kim, Soongsil University, Seoul, Korea

- Designed and developed a digital textbook that enables students to learn geography by experiencing the huge natural phenomenon in 3D game-like simulations.

SKILLS

Social Media Data Analysis	Data Collection using Python, Twitter API, Facebook API, Google API, Google App Engine, Java Script, HTML/CSS Statistical Modeling, Trend Analysis, and Text Data Mining using Python (SciPy), R, and LIWC
Sensor Data Analysis	Data Collection using Kinect, webcam, and Q sensor (Electrodermal activity + Acceleration + Temperature) Data Pre and Post Signal Processing using MATLAB and R Pattern Recognition in Time Series and Machine Learning using Python (SciPy and Scikit-learn), MATLAB, and R
Visualization	Web (D3), OSX (Core Plot), Python (Plotly), and Processing
Programming Languages	Java, C, C++, C#, Objective C, Processing, Python, MATLAB
Web Programming	HTML/CSS, Django, PHP, JavaScript, Flash
Mobile Platforms	Android, iPhone
API	Facebook API, Twitter API, Google API, Google App Engine, OpenGL
Graphic Tools	Adobe Illustrator, Photoshop, Dreamweaver