# Minsu Park

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# **EDUCATION**

August 2014 – May 2019 (Expected)

**Ph.D. Information Science**, Cornell University, Ithaca, NY, USA Committee: Michael Macy (chair), Mor Naaman, Drew Margolin

2012 M.S.

M.S. Culture Technology, KAIST, Daejeon, Korea

2010

B.S. Mechanical and System Design Engineering, Hongik University, Seoul, Korea

## RESEARCH INTERESTS

Computational Social Science, Social Computing, Human-centered Data Science

Some Keywords: Cultural Consumption (with special emphasis on music, video, and food), Cultural Tastes, Social Networks, User Engagement, Localized Social Context, Socioeconomic Status Imputation

#### Relevant Coursework:

[Information Science] Behavior and Information Technology; Computational Methods for Information Science Research; Information Ethnographies: Information, Technology, and Society; Networks, Crowds, and Markets: Foundations for Formal Analysis and Design

[Sociology] Social Dynamics and Computational Methods; Social Network Theory
[Communication] Mediated Interpersonal Communication; Research Methods for Social Networks and Social

Media

#### **PUBLICATIONS**

Journal Articles

**Minsu Park**, Jennifer Thom, Sarah Mennicken, Henriette Cramer, and Michael Macy. Global Music Streaming Data Reveals Diurnal and Seasonal Patterns of Affective Preference. 2019. *Nature Human Behaviour* 3. pp. 230–236. https://doi.org/10.1038/s41562-018-0508-z

**Minsu Park\***, Jaram Park\*, Young Min Baek, and Michael Macy. Cultural Values and Cross-cultural Video Consumption on YouTube. 2017. *PLoS ONE* 12(5): e0177865.

https://doi.org/10.1371/journal.pone.0177865 – Accepted and presented at the 11<sup>th</sup> International AAAI Conference on Web and Social Media (*ICWSM 2017*) under the social science and sociophysics track (acceptance rate = 14%; \* represents equal contributions)

# Conference Proceedings

**Minsu Park**, Mor Naaman, and Jonah Berger. A Data-driven Study of View Duration on YouTube. The 10<sup>th</sup> International AAAI Conference on Web and Social Media (*ICWSM 2016*) (short paper; acceptance rate = 21%)

**Minsu Park**, Ingmar Weber, Mor Naaman, and Sarah Vieweg. Understanding Musical Diversity via Online Social Media. The 9<sup>th</sup> International AAAI Conference on Web and Social Media (*ICWSM 2015*) (acceptance rate = 18%)

**Minsu Park**, David W. McDonald, and Meeyoung Cha. Perception Differences between the Depressed and Non-depressed Users in Twitter. The 7<sup>th</sup> International AAAI Conference on Weblogs and Social Media (*ICWSM 2013*) (acceptance rate = 20%)

Ricardo Gomez, Norah Abokhodair, Ivette Bayo, and **Minsu Park**. Computer Training to Empower Day Laborers: A Heat Map to Address Emotional Barriers and Technical Skills. The 46<sup>th</sup> IEEE Hawaii International Conference on System Sciences (*HICSS 2013*)

**Minsu Park**, Chiyoung Cha, and Meeyoung Cha. Depressive Moods of Users Portrayed in Online Social Networks. The workshop on Health Informatics (*HI-KDD 2012*) at the 18<sup>th</sup> ACM International Conference on Knowledge Discovery and Data Mining (*SIGKDD 2012*)

**Book Chapters** 

Meeyoung Cha and **Minsu Park**. *Ch 15, Social Network Analysis of Knowledge-based Services*. Knowledge Service Engineering Handbook. 2012. CRC Press, Taylor and Francis Group

**Conference Abstracts** 

**Minsu Park**, Chiyoung Cha, and Meeyoung Cha. Depressive Moods of Users Portrayed in Online Social Networks. The 5<sup>th</sup> Medicine 2.0 (*Medicine 2.0 2012*) – Full oral presentation

**Minsu Park**, Chiyoung Cha, and Meeyoung Cha. Depressive Moods of Users Captured in Twitter, an Online Social Network. The  $\mathbf{1}^{\text{st}}$  Global Congress for Qualitative Health Research (*GCQHR 2011*) – Full oral presentation

**Position Papers** 

**Minsu Park**, Mor Naaman, and Tara F. Bishop. Collaborative Doctor-Patient Tools for Analyzing Patient Logs. Moving Beyond e-Health and the Quantified Self Workshop on the 18<sup>th</sup> ACM International Conference on Computer Supported Cooperative Work (*CSCW 2015*)

**Minsu Park**. Depressive Moods of Users Captured in Twitter, an Online Social Network. Health Informatics Workshop on the 15<sup>th</sup> ACM International Conference on Computer Supported Cooperative Work (*CSCW 2012*)

Work in Progress

**Minsu Park** and Jessa Lingel. Reappropriating Infrastructures: A Qualitative Study of Transnational Migrants' Technology Use in Qatar. – Working Paper

Patrick Park, **Minsu Park**, and Michael Macy. Economic Correlates of Diversity and Inequality in Online Social Networks. – Working Paper; Presented at the 78<sup>th</sup> Annual Meeting of the Academy of Management (*AOM 2018; Organization and Management Theory division*) and the 4<sup>th</sup> Annual International Conference on Computational Social Science (*IC*<sup>2</sup>*S*<sup>2</sup> 2018)

**Minsu Park**, Kenta Takatsu, and Michael Macy. Globalization vs. Glocalization: An Empirical Analysis on the Diffusion of Popular Contents across 72 Countries on YouTube. – Manuscript in preparation

Chao Yu, **Minsu Park**, and Drew Margolin. Seeking Authenticity in the midst of Dirtiness. – Manuscript in preparation

Some other on-going projects are related to (1) socioeconomic and demographic homophily on online social media; (2) social and psychological contexts of music consumption behavior captured by sensor data; and (3) cultural differences on product reviewing activities.

Theses

Exploring Healthcare Opportunities in Twitter: On User-generated Health Information and Depressive Moods of Users. M.S. Thesis, KAIST (2012)

Designing a Transformable and Rotatable Car Seat. B.S. Thesis, Hongik University (2010)

# **WORK EXPERIENCE**

Summer 2018

UX Research Intern, Google, San Francisco, CA, USA

- Worked with Michael Gilbert (host); Elizabeth Churchill
- Modeling cross-device human-computer interactions using cross-device log data in order to understand narratives and intents of user behaviors.

#### Summer 2017 Data Science Research Intern, Product Insights, Spotify, Somerville, MA, USA

- Worked with Jennifer Thom (host); Henriette Cramer
- Conducted a large-scale time series analysis on repeating patterns of musical consumption and anomaly detection.

#### Summer 2016

#### UX Research Intern, Google, San Francisco, CA, USA

- Worked with Julia Haines (host); Michael Gilbert; Elizabeth Churchill
- Conducted some qualitative (e.g., interview data analysis based on the grounded theory) and quantitative (e.g., mobile device app log data analysis) studies to identify latent patterns of technological practices and understand situational and perceptional motivations of those behavioral patterns.

### 2015 – present

### Research Assistant, Social Dynamics Lab, Cornell University, Ithaca, NY, USA

- Working with Michael Macy
- Exploring how people use music for mood management using a large-scale streaming data as well as a set of sensor data.
- Developing rules and algorithms to infer socioeconomic status (e.g., income) of social media users based on contents they created; analyzing class homophily in multiple social media platforms (e.g., Twitter and Facebook) using the imputed socioeconomic status.
- Exploring omnivorousness regarding cultural tastes in country-level as well as in individual-level using online social media data (e.g., YouTube, Twitter, Facebook, and Last.fm).

### 2014 – 2015

### Research Assistant, Social Technologies Lab, Cornell Tech, New York City, NY, USA

- Worked with Mor Naaman
- Studied whether and how indicators of collective preferences and reactions are associated with view duration of videos using two distinct YouTube datasets collected from a Chrome extension and random sample.

#### Spring 2014

## Research Intern, Social Computing Group, Qatar Computing Research Institute, Doha, Qatar

- Worked with Ingmar Weber (host); Sarah Vieweg
- Studied relationships between cultural tastes regarding music consumption and socioeconomic status using Last.fm and Twitter data; use of ICTs of transnational workers in Qatar in the context of globalization, online connectivity, and socioeconomic status based on surveys, semi-structured interviews, and participant observations.

#### 2013 Researcher, Department of Biomedical Informatics, Asan Medical Center, Seoul, Korea

- Studied how Korean users search about Swine Flu through large-scale surveys and focus groups, and develop a Korean version of Google Flu Trend based on queries in the 2<sup>nd</sup> biggest search engine in Korea, Daum.
- 2012 **Research Intern,** Social Computing Lab, Information School, University of Washington, Seattle, WA, USA
  - Worked with Jeffrey Kim (host); David W. McDonald; Ricardo Gomez
  - Studied perception differences between the depressed and non-depressed users in Twitter based on interviews; the social and cultural benefits of ICTs for underserved minorities in Seattle based on structured interviews, focus groups, and field observations.

#### 2011 – 2012

# **Research Assistant,** Social Computing Lab., Graduate School of Culture Technology (GSCT), KAIST, Daejeon, Korea

- Worked with Meeyoung Cha
- Studied how depression is talked about in Twitter and whether the use of sentiments in tweets can be a marker for detecting depressed users based on a series of content analyses.

#### **TEACHING**

#### **Teaching Assistant**

Networks II: Market Design (INFO 4220/CS 4852/ECON 3825)

Instructor: Professor Arpita Ghosh, Cornell University (Spring 2019)

MPS Project and MPS Project Practicum (INFO/CS 5900 and 5901)

Instructor: Dr. Jonathan Kent Saxe, Cornell University (Fall 2018)

Language and Information (INFO/CS 4300)

• Instructor: Professor Cristian Danescu-Niculescu-Mizil, Cornell University (Spring 2018)

Introduction to HCI (INFO/COMM 3450)

Instructor: Dr. Gilly Leshed, Cornell University (Fall 2016)

Networks II: Market Design (INFO 4220/CS 4852/ECON 3825)

Instructor: Professor Arpita Ghosh, Cornell University (Spring 2016)

**SERVICE** 

Vice President Information Science Graduate Student Association (2016-2017)

Organizing Committee Workshop Chair, Social Informatics (2019)

Program Committee Poster Program Committee, ACM Web Science (2019)

Program Committee, AAAI ICWSM (2018, 2019)

Associate Chair for Late Breaking Work, ACM CHI (2018)

External Reviewer AAAI ICWSM (2016 – 2018)

ACM CHI (2014 – 2019) ACM CSCW (2017 – 2019) ACM UbiComp (2014) Medicine 2.0 (2012 – 2014)

Journal of Medical Internet Research (2014 – 2016) Journal of Multimedia Tools and Applications (2016)

Student Volunteer iConference 2016, Philadelphia, PA, USA

# SCHOLARSHIPS, GRANTS, & AWARDS

2018	Best Reviewer Award, AAAI ICWSM 2018
2016	The Best of the arXiv (week ending April 23, 2016), MIT Technology Review (for Understanding
	Musical Diversity via Online Social Media)
2015	Special Recognition on ACM CHI 2015 Full Paper/Note Review
2011	Graduate Research Outstanding Award, GSCT, KAIST
2010	Graduate Academic Outstanding Award, GSCT, KAIST
2010 – 2011	Culture Technology National Scholarship (full tuition and stipend supports for entire years for MS
	degree), Ministry of Culture, Sports, and Tourism, Korea
2009	Best Thesis Award, Mechanical and System Design Engineering, Hongik University
2008 – 2009	Hongik Scholarship, Hongik University (merit-based full scholarships for all semesters through 3 <sup>rd</sup> and
	4 <sup>th</sup> years of undergraduate)