Sungkyu Shaun Park

CONTACT INFORMATION

Data Science Laboratory
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RESEARCH INTERESTS

Understanding human behaviors and psychiatric disorders in real world through the lens of large-scale data (e.g., mobile-sensing user logs, online social network logs, and so on)

- Predicting and interpreting the degree of disorders utilizing deep-learning approaches
- Discovering users' unique traits driving the disorders
- Developing customized mobile intervention applications

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea

Ph.D. in Graduate School of Culture Technology August 2020

- Thesis Topic: Neural Network-based Learning of Sleep Patterns and Application-driven Interventions
- Advisor: Dr. Meeyoung Cha

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea

M.S. in Graduate School of Web Science Technology, School of Computing August 2014

- Thesis Topic: Exploring depressive moods through the lens of online social behaviors
- Advisor: Dr. Meeyoung Cha

Sungkyunkwan University, Suwon, South Korea

B.S. in Information and Communication Engineering February 2009

SELECTED PUBLICATIONS

S. Han, S. Park, **S. Park**, S. Kim, and M. Cha. Mitigating Embedding and Class Assignment Mismatch in Unsupervised Image Classification. In *proc. of the 2020 European Conference on Computer Vision (ECCV 2020)*, accepted for the publication, 2020. *Acceptance rate for full paper = 27.1%*

S. Park, S. W. Lee, S. Han, and M. Cha. Clustering Insomnia Patterns by Data from Wearable Devices: Algorithm Development and Validation. *JMIR Mhealth and Uhealth (JMU)*, 2019. doi:10.2196/14473. *Impact Factor = 4.301* **[SCIE]**

S. Park, C. T. Li, S. Han, H. Cheng, S. W. Lee, and M. Cha. Learning Sleep Quality from Daily Logs, In *proc. of the 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, accepted for the publication, 2019. *Acceptance rate for full paper = 14.2%*

S. Park, S. W. Lee, and M. Cha. Exploring Insomnia-related Clusters based on Intricate Relationship Among Behavioral, Biological, and Sleeping Data: Focusing on a Smart Band Wearing Experiment, In *proc. of the Korean DataBase Conference (KDBC)*, 2018. (Korean)

S. Park, S. W. Lee, and M. Cha. Exploring intricate relationship among behavioral, biological, and sleeping dimensions, In *proc. of the International School and Conference on Network Science (NetSci)*, accepted for the oral presentation, 2018.

S. Park, I. Kim, and M. Cha. Mobile calling patterns are linked to young adults' mental health, In *proc. of the International Workshop on Data and Text Mining in Biomedical Informatics (DTMBIO). CIKM*, accepted for the oral presentation, 2017.

S. Park, J. Park, S. Cho, and J. Won. Approaches to Successful Entry of the Ride-sharing Service for Startups. In *proc. of ACM CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 2017.

S. W. Lee, I. Kim, J. Yoo, **S. Park**, B. Jeong, and M. Cha. Insights from an expressive writing intervention on Facebook to help alleviate depressive symptoms, In Elsevier Computers in Human Behavior, 62: 613-619, 2016. *Impact Factor = 2.694* **[SSCI]**

I. Kim, S. W. Lee, **S. Park**, J. Yoo, M. Cha, and B. Jeong. Designing an expressive writing platform for young adults in Korea. In *proc. of ACM CHI Workshop on HCI and Health*, 2015.

S. Park, I. Kim, S. W. Lee, J. Yoo, B. Jeong, and M. Cha. Manifestation of Depression and Loneliness on Social Networks: A Case Study of Young Adults on Facebook. In *proc. of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, accepted for the publication, 2015.
Acceptance rate for full paper = 28%

S. Park, S. W. Lee, J. Kwak, M. Cha, and B. Jeong. Activities on Facebook Reveal the Depressive State of Users. *Journal of Medical Internet Research (JMIR)*, 15(10):e217, 2013. doi:10.2196/jmir.2718.
Impact Factor = 4.7 **[SCIE]**

INVITED TALKS

Successfully entering the ride-sharing industry: focusing on infrastructure development and service operation, Uiwang, South Korea — June 13, 2017

- Hyundai Motor Group

Facebook activities reveal the depressive states of users, Daegu, South Korea — December 13, 2013

- Daegu Gyeongbuk International Social Network Conference (DISC) 2013

TEACHING EXPERIENCE

Teaching Assistant, KAIST GCT576 - Social Computing — Fall 2018

Teaching Assistant, KAIST CS564 - Introduction to Big Data Analytics Using R — Spring 2018

Instructor, Kangnam University - Youth Career Academy Mentoring: Big Data Expert Course for Senior Undergraduate Students — January – February 2016

PROFESSIONAL EXPERIENCE

Research Intern at Institute for Basic Science (IBS), Daejeon, Korea (Full-time) — January 2019 – August 2020
Chief Investigator: Dr. Meeyoung Cha

- *Data Science Group, Center for Mathematical and Computational Sciences*
- Focused on mainly three research domains: 1) mental health; 2) fake news; 3) unsupervised learning

Research Intern at Nokia Bell Labs, Cambridge, United Kingdom (Full-time) — June – August 2019
Department Head: Dr. Daniele Quercia

- *Social Dynamics Team*
- Developed a smartwatch application that can retrieve health signals and self-reported mood data

Co-founder & Chief Operating Officer at Kaniza Lab Co., Ltd, Seoul, Korea — March 2015 – January 2017

- *Business Operation and Data Analysis Team (Full-time)*
- Launched and managed two mobile-based on-demand platforms on public transportation domains

Research Engineer at Samsung Electronics, Suwon, South Korea (Full-time) — January 2009 – April 2012
Director: Mr. David Yoonwoo Lee

- *Standards Certification Lab. in Business Planning Group at Visual Display Business*
- Dealt with standardization of technical formats on TV and home entertainment products

TECHNICAL SKILLS

Fluency in quantitative methods: statistics, machine- and deep-learning, and social network analysis
Programming: Python, TensorFlow, PyTorch, R, MATLAB, JavaScript, and C