

Sungkyu Shaun Park, Ph.D.

CONTACT INFORMATION	Data Science Group, Institute for Basic Science (IBS) 55, Expo-ro, Yuseong-gu, Daejeon, Republic of Korea, 34126	e-mail: shaun01.park@gmail.com
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) <ul style="list-style-type: none">• 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 <i>Ph.D. in Graduate School of Culture Technology</i> August 2020 <ul style="list-style-type: none">• Thesis Topic: Neural Network-based Learning of Sleep Patterns and Application-driven Interventions• Advisor: Dr. Meeyoung Cha and Dr. Wonjoon Kim Korea Advanced Institute of Science and Technology (KAIST) , Daejeon, South Korea <i>M.S. in Graduate School of Web Science Technology, School of Computing</i> August 2014 <ul style="list-style-type: none">• Thesis Topic: Exploring depressive moods through the lens of online social behaviors• Advisor: Dr. Meeyoung Cha Sungkyunkwan University , Suwon, South Korea <i>B.S. in Information and Communication Engineering</i> February 2009	
SELECTED PUBLICATIONS	<p>M. Shin, S. Han, S. Park, and M. Cha. A Risk Communication Event Detection Model via Contrastive Learning. In <i>the 3rd Workshop on NLP for Internet Freedom (NLP4IF)</i>, co-located with COLING, accepted for the oral presentation, 2020. (Short paper)</p> <p>S. Park, S. Han, J. Kim, M. M. Molaie, H. D. Vu, K. Singh, J. Han, W. Lee, M. Cha. Risk communication in Asian countries: COVID-19 discourse on Twitter. In <i>In-depth Stage Sessions and Presentations in the Conference for Truth and Trust Online (TTO)</i>, 2020. (Short paper)</p> <p>S. Park, M. Constantinides, L. M. Aiello, D. Quercia, and P. v. Gent. WellBeat: A Framework for Tracking Daily Well-being Using Smartwatches. <i>IEEE Internet Computing</i>, 2020. doi:10.1109/MIC.2020.3017867. <i>Impact Factor = 4.231 [SCIE]</i></p> <p>S. Han, S. Park, S. Park, S. Kim, and M. Cha. Mitigating Embedding and Class Assignment Mismatch in Unsupervised Image Classification. In <i>proc. of the 2020 European Conference on Computer Vision (ECCV)</i>, 2020. <i>Acceptance rate for full paper = 27.1%</i></p> <p>S. Park, S. W. Lee, S. Han, and M. Cha. Clustering Insomnia Patterns by Data from Wearable Devices: Algorithm Development and Validation. <i>JMIR Mhealth and Uhealth (JMU)</i>, 2019. doi:10.2196/14473. <i>Impact Factor = 4.301 [SCIE]</i></p> <p>S. Park, C. T. Li, S. Han, H. Cheng, S. W. Lee, and M. Cha. Learning Sleep Quality from Daily Logs, In <i>proc. of the 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)</i>, 2019. <i>Acceptance rate for full paper = 14.2%</i></p>	

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)*, 2018. (Abstract)

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*, 2017. (Short paper)

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]*

PATENTS

S. Park, S. W. Lee, and J. Won. Method and apparatus for providing insomnia intervention service, South Korea, Patent No. 10-2141804 July 31, 2020

J. Park and **S. Park**. Mobile taxi-pooling service companion recommendation method and device using trust networks, South Korea, Patent No. 10-1813779 December 22, 2017

J. Park and **S. Park**. Mobile taxi-pooling service charging method and device, South Korea, Patent No. 10-1813780 December 22, 2017

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	<p>Teaching Assistant, KAIST GCT576 - Social Computing Fall 2018</p> <p>Teaching Assistant, KAIST CS564 - Introduction to Big Data Analytics Using R Spring 2018</p> <p>Instructor, Kangnam University - Youth Career Academy Mentoring: Big Data Expert Course for Senior Undergraduate Students January – February 2016</p>
PROFESSIONAL EXPERIENCE	<p>Postdoctoral Fellowship at Institute for Basic Science (IBS), Daejeon, Korea (Full-time) Sep. 2020 – Present Chief Investigator: Dr. Meeyoung Cha</p> <ul style="list-style-type: none"> • <i>Data Science Group, Center for Mathematical and Computational Sciences</i> • Focused on four research domains: 1) mental health; 2) text mining; 3) unsupervised learning; 4) cultural analytics <p>Research Intern at Nokia Bell Labs, Cambridge, United Kingdom (Full-time) June – August 2019 Department Head: Dr. Daniele Quercia</p> <ul style="list-style-type: none"> • <i>Social Dynamics Team</i> • Developed a smartwatch application that can retrieve health signals and self-reported mood data <p>Co-founder & Chief Operating Officer at Kaniza Lab Co., Ltd, Seoul, Korea March 2015 – January 2017</p> <ul style="list-style-type: none"> • <i>Business Operation and Data Analysis Team (Full-time)</i> • Launched and managed two mobile-based on-demand platforms on public transportation domains <p>Research Engineer at Samsung Electronics, Suwon, South Korea (Full-time) January 2009 – April 2012 Director: Mr. David Yoonwoo Lee</p> <ul style="list-style-type: none"> • <i>Standards Certification Lab. in Business Planning Group at Visual Display Business</i> • Dealt with standardization of technical formats on TV and home entertainment products
TECHNICAL SKILLS	<p>Fluency in quantitative methods: statistics, machine- and deep-learning, and social network analysis Programming: Python, TensorFlow, PyTorch, R, MATLAB, JavaScript, and C</p>