

## Sungkyu Shaun Park, Ph.D.

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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"><li>• Predicting and interpreting the degree of disorders utilizing deep-learning approaches</li><li>• Discovering users' unique traits driving the disorders</li><li>• Developing customized mobile intervention applications</li></ul>	
EDUCATION	<b>Korea Advanced Institute of Science and Technology (KAIST)</b> , Daejeon, South Korea <i>Ph.D. in Graduate School of Culture Technology</i> August 2020 <ul style="list-style-type: none"><li>• Thesis Topic: Neural Network-based Learning of Sleep Patterns and Application-driven Interventions</li><li>• Advisor: Dr. Meeyoung Cha</li></ul> <b>Korea Advanced Institute of Science and Technology (KAIST)</b> , 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"><li>• Thesis Topic: Exploring depressive moods through the lens of online social behaviors</li><li>• Advisor: Dr. Meeyoung Cha</li></ul> <b>Sungkyunkwan University</b> , Suwon, South Korea <i>B.S. in Information and Communication Engineering</i> February 2009	
SELECTED PUBLICATIONS	<p>S. Han, S. Park, <b>S. Park</b>, 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 2020)</i>, accepted for the publication, 2020. <i>Acceptance rate for full paper</i> = 27.1%</p> <p><b>S. Park</b>, 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</i> = 4.301 [SCIE]</p> <p><b>S. Park</b>, 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>, accepted for the publication, 2019. <i>Acceptance rate for full paper</i> = 14.2%</p> <p><b>S. Park</b>, 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 <i>proc. of the Korean DataBase Conference (KDBC)</i>, 2018. (Korean)</p> <p><b>S. Park</b>, S. W. Lee, and M. Cha. Exploring intricate relationship among behavioral, biological, and sleeping dimensions, In <i>proc. of the International School and Conference on Network Science (NetSci)</i>, accepted for the oral presentation, 2018.</p> <p><b>S. Park</b>, I. Kim, and M. Cha. Mobile calling patterns are linked to young adults' mental health, In <i>proc. of the International Workshop on Data and Text Mining in Biomedical Informatics (DTMBIO)</i>. CIKM, accepted for the oral presentation, 2017.</p>	

**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, J. Won. Method and apparatus for providing insomnia intervention service, South Korea, Application No. 10-2018-0011895 July 28, 2020

J. Park, **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, **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

**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