Kunwoo Park

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Mar. 2020 - Present

CURRENT University of California, Los Angeles, USA

Position Postdoctoral researcher

Advisor: Dr. Jungseock Joo

RESEARCH INTEREST

Data Science and Machine Learning, Social Computing, Computational Social Science

My research interest lies in understanding and tackling emerging social problems through large-scale online data, and my goal as a data scientist is to address the problems through deep learning approaches on content and user behaviors. Recent interest focuses on detecting *online misinformation* and underlying *social bias* in online media through multi-modal cues such as image and text.

EDUCATION

KAIST, Daejeon, South Korea

Feb. 2018

Ph.D. in Graduate School of Web Science Technology, School of Computing

- o Honored thesis: Identification and analysis of key factors driving longevity in online social platforms
- o Committee: Meeyoung Cha (advisor), Sung-hyon Myaeng, Sue Moon, Juyong Park, Dongman Lee

KAIST, Daejeon, South Korea

Feb. 2014

M.S. in Division of Web Science and Technology

- o Advisor: Meeyoung Cha
- o Thesis: Gender swapping and its effects in MMORPGs

Kwangwoon University, Seoul, South Korea

Feb. 2012

B.S. in Computer Science

ACADEMIC SERVICES

Technical Program Committee (Reviewer) of WWW (2021), AAAI (2021), ICWSM (2015, 2017-2021), WebSci (2019-2020), SocInfo (2020).

Editorial Board of Frontiers in Big Data (2020-present).

External Reviewer of Palgrave Communications, Online Information Review, Journal of Advertising, International Journal of Press/Politics, EPJ Data Science.

Student Volunteer at WWW 2017.

RESEARCH EXPERIENCES

Postdoctoral Researcher at Qatar Computing Research Institute, Doha, Qatar
Advisor: Sanjay Chawla

Postdoctoral Researcher at KAIST, Daejeon, South Korea
Advisor: Meeyoung Cha

Mar. 2018 – Oct. 2018

Mar. 2018 – Oct. 2018

Research Associate at Qatar Computing Research Institute, Doha, Qatar Dec. 2016 – Aug. 2017 Advisor: Haewoon Kwak

Data Analysis & AI Intern at Netmarble Games, Seoul, South Korea Jul. 2015 – Aug. 2015

Research Assistant at Qatar Computing Research Institute, Doha, Qatar Feb. 2014 – Aug. 2014 Advisor: Ingmar Weber

Trainee at National Institute for Mathematical Science, Daejeon, South Korea Sep. 2012 – Dec. 2012

PEER-REVIEWED PUBLICATIONS (INTERNATIONAL)

- **PEER-REVIEWED** * indicates an equal contribution.
 - 1. Learning to Detect Incongruence in News Headline and Body Text via a Graph Neural Network. *under review*.
 - 2. Automatically Detecting Image-Text Mismatch on Instagram with Deep Learning. *under minor revision*.
 - 3. **Kunwoo Park**, Haewoon Kwak, Jisun An, and Sanjay Chawla. Understanding the Effects of Editing News Headlines by Media Accounts on Social Media Engagement through Computational Frameworks. *To appear at the International AAAI Conference on Web and Social Media (ICWSM)*, 2021.
 - 4. Danni Chen, **Kunwoo Park**, and Jungseock Joo. Understanding Gender Stereotypes and Electoral Success from Visual Self-presentations of Politicians in Social Media. *To appear at the ACM Multimedia Conference (MM) Workshops*, 2020.
 - 5. **Kunwoo Park**, Taegyun Kim, Seunghyun Yoon, Meeyoung Cha, and Kyomin Jung. BaitWatcher: A Lightweight Web Interface for the Detection of Incongruent News Headlines. *In Book Chapters on Fake News, Disinformation, and Misinformation in Social Media (FNDM)*, Springer, 2020.
 - 6. **Kunwoo Park**, Haewoon Kwak, Hyeonho Song, and Meeyoung Cha. "Trust me, I have a Ph.D.": A Propensity Score Analysis on the Halo Effect of Disclosing One's Offline Social Status in Online Communities. *In proc. of the International AAAI Conference on Web and Social Media (ICWSM)*, 2020. (AR=20%)
 - 7. Jeongmin Kim, **Kunwoo Park**, Hyeonho Song, Jaimie Yejean Park, and Meeyoung Cha. Learning How Spectator Reactions Affect Popularity on Twitch. *In proc. of the IEEE International Conference on Big Data and Smart Computing (BigComp)*, 2020. (AR for oral presentation=23.7%)
 - 8. Seunghyun Yoon*, **Kunwoo Park***, Joongbo Shin, Hongjun Lim, Seungpil Won, Meeyoung Cha, and Kyomin Jung. Detecting Incongruity Between News Headline and Body Text via a Deep Hierarchical Encoder. *In proc. of the AAAI Conference on Artificial Intelligence (AAAI)*, 2019. (AR=16%) *Featured* in YTN, Channel A, Joong daily, and many others (in Korean).
 - 9. **Kunwoo Park**, Meeyoung Cha, and Eunhee Rhim. Positivity Bias in Customer Satisfaction Ratings. *In proc. of the Web Conference (WWW) BIG Web Track*, 2018. *Featured* in etnews (in Korean).
 - 10. **Kunwoo Park**, Meeyoung Cha, Haewoon Kwak, and Kuan-Ta Chen. Achievement and Friends: Key Factors of Player Retention Vary Across Player Levels in Online Multiplayer Games. *In proc. of the International Conference on World Wide Web (WWW) Game Track*, 2017.
 - 11. **Kunwoo Park**, Ingmar Weber, Meeyoung Cha, and Chul Lee. Persistent Sharing of Fitness App Status on Twitter. *In proc. of the ACM International Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, 2016. (AR=25%) *Featured* in Mathematics Donga journal (in Korean).
 - 12. **Kunwoo Park**, Jaewoo Kim, Jaram Park, Meeyoung Cha, Jiin Nam, Seunghyun Yoon, and Eunhee Rhim. Mining the Minds of Customers from Online Chat Logs. *In proc. of the ACM International Conference on Information and Knowledge Management (CIKM)*, 2015. (short paper)
 - 13. Gareth Paul Beeston, Manuel Leon Urrutia, Caroline Halcrow, Xianni Xiao, Lu Liu, Jinchuan Wang, Jinho Jay Kim, and **Kunwoo Park**. Humour reactions in crisis: a proximal analysis of Chinese posts on sina weibo in reaction to the salt panic of march 2011. *In proc. of the International Conference on World Wide Web (WWW)*, 2014.
 - 14. **Kunwoo Park**, Jaram Park, SungKyu Park, Jaewoo Kim, Sejeong Kwon, Jinah Kwak, and Meeyoung Cha. Voice of the Employees Resonated in Online Bamboo Forests. *In proc. of the ICWSM Workshop on Social Computing for Workforce* 2.0, 2013.
 - 15. **Kunwoo Park**, Seonggyu Lee, Eunae Kim, Minjee Park, Juyong Park, and Meeyoung Cha. Mood and Weather: Feeling the Heat? *In proc. of the International AAAI Conference on Web and Social Media (ICWSM)*, 2013. (short paper)
 - 16. Jing-Kai Lou*, **Kunwoo Park***, Meeyoung Cha, Juyong Park, Chin-Laung Lei, and Kuan-Ta Chen. Gender Swapping and User Behaviors in Online Social Games. *In proc. of the International Conference on World Wide Web (WWW)*, 2013. (AR=15%) *Featured* in Mathematics Donga journal (in Korean).

PEER-REVIEWED PUBLICATIONS (DOMESTIC)

- 1. Hyeonho Song, **Kunwoo Park**, and Meeyoung Cha. An Embedding Method of Emotes for the Detection of Popular Clips on Twitch.tv. *under review*.
- 2. Hyeonho Song, Jeongmin Kim, **Kunwoo Park**, and Meeyoung Cha. Highlight Prediction on Online Streaming Video. *In Proc. of the KIISE Conference*, 2019.
- 3. Taegyun Kim, **Kunwoo Park**, and Meeyoung Cha. A Deep Learning System that Detects Consistency of News Articles. *In Proc. of the KIISE Conference*, 2018.
- 4. Seungche Kang, Jaeheon Kim, **Kunwoo Park**, and Meeyoung Cha. Classification of Hateful Comments in a Korean News Portal. *In Proc. of the KIISE Conference*, 2018.
- 5. **Kunwoo Park**, Haewoon Kwak, Hyeonho Song, and Meeyoung Cha. Causal Effects of Offline Reputation Information on User Longevity in Online Social Platforms. *In Proc. of the KIISE Conference*, 2017.
- 6. **Kunwoo Park** and Meeyoung Cha. Churn Analysis of Max Level Users in Online Games. *In Journal of Korean Institute of Information Scientists and Engineers*, 2017. *Featured* at YTN, ThisIsGame, and many more (in Korean).
- 7. Jaewoo Kim, **Kunwoo Park**, and Meeyoung Cha. Mining Activity-oriented Social Opinion of a Place: Using Word Embedding. *In Proc. of the KIISE Conference*, 2016.
- 8. **Kunwoo Park**, Meeyoung Cha, and Eunhee Rhim. Early Detection of Counseling Satisfaction using Recurrent Neural Network. *In Proc. of the KIISE Conference*, 2016.
- 9. **Kunwoo Park**, Sunyeol Lim, Taeyang Lee, Jeonghoon Kim, Woongchul Choi. Implementation of a Tendency-judging System for Mobile Social Network Services by Using the Module that Analyzes Emotional Words. *In Proc. of the KIISE Conference*, 2011.

TEACHING EXPERIENCES

- 1. Understanding Gender Stereotyped Self-presentations of Politicians, Guest Lecture at Comm 188C. University of California, Los Angeles, May 2020.
- 2. Hands-on Experiences on Attention-based RNN, Lecture at IBS Deep Learning Summer School. Institute of Basic Science, June 2019.
- 3. Detecting Misleading Headlines in Online News, Lecture at QCAI Deep Engineering Week. Qatar Computing Research Institute, May 2019.
- 4. Guest Lecture at CS 564. KAIST, June 2018.
- 5. Teaching Assistant at WST 891. KAIST, September to December 2012.

HONORS

| The Outstanding PhD Thesis Award, School of Computing, KAIST | Feb. 2018 |
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| Special Prize (the 1st place among college teams), R&D Competition at Artificial Intelligence, | |
| the Institute for Information & communications Technology Promotion (IITP) | Dec. 2017 |
| NAVER PhD Fellowship Award, NAVER Corp | Jul. 2016 |
| Creative Award, Tour Big Data Analysis Competition, the Korean Culture & Tourism Institute | Jul. 2014 |
| Student Travel Grant Award, the ICWSM, AAAI | Jul. 2013 |
| Smart Award, IBM Smarter Planet Contest, IBM Korea | Oct. 2010 |

REFERENCES

- Dr. Meeyoung Cha (Associate professor at KAIST / meeyoungcha@kaist.ac.kr)
- Dr. Jungseock Joo (Assistant professor at University of California, Los Angeles / jjoo@comm.ucla.edu)
- Dr. Haewoon Kwak (Associate professor at Singapore Management University / haewoon@acm.org)