Kunwoo Park

bywords.github.io
ssu-humane.github.io
kunwoo.park@ssu.ac.kr

CURRENT POSITION	School of AI Convergence, Soongsil University, Seoul, South Korea	Mar. 2021 - Present

Assistant professor
Principal Investigator of the Human-Centered Data Science and Language Technology (HUMANE) Lab.

RESEARCH INTEREST

Data Science   **Natural Language Processing**   **Computational Social Science**

I study data science and language technologies to tackle social problems, such as online misinformation, bias, and hate expressions. Recent research focuses on contrastive learning: sentence embedding and vision-and-language models.

EDUCATION

KAIST, Daejeon, South Korea   Feb. 2018
Ph.D. in Graduate School of Web Science Technology, School of Computing
  ○ Honored thesis: Identification and analysis of key factors driving longevity in online social platforms
  ○ 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
  ○ Advisor: Meeyoung Cha
  ○ Thesis: Gender swapping and its effects in MMORPGs

Kwangwoon University, Seoul, South Korea   Feb. 2012
B.S. in Computer Science

ACADEMIC SERVICES

Co-tutorial Chair at *FAccT* (2022), Session Chair at *KDD* (2021).

Program Committee (Reviewer) at *AAAI* (2021-23), *ACL* (2021-23), *EACL* (2023), *EMNLP* (2021-22), *KDD* (2021-23), *AACL* (2022), *WebConf* (2021-23), *WSDM* (2022-23) *ICWSM* (2015-23), and *SocialNLP* (2021-22).

Reviewer at *Palgrave Communications, Online Information Review, Journal of Advertising, Information Processing and Management, International Journal of Press/Politics, EPJ Data Science, IEEE Access, Computational Communication Research, International Journal of Communication.*

Student Volunteer at *WWW* (2017).

RESEARCH EXPERIENCES

Postdoctoral Researcher at University of California, Los Angeles, USA   Mar. 2020 – Feb. 2021
Advisor: Jungseock Joo

Postdoctoral Researcher at Qatar Computing Research Institute, Doha, Qatar   Dec. 2018 – Jan. 2020
Advisor: Sanjay Chawla

Postdoctoral Researcher at KAIST, Daejeon, South Korea   Mar. 2018 – Oct. 2018
Advisor: Meeyoung Cha

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

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

* indicates an equal contribution. † indicates the corresponding authorship of Dr. Park.

1. Seonyeong Song, Hyeonho Song, **Kunwoo Park**†, Jiyoung Han, Meeyoung Cha. Detecting Contextomized Quotes in News Headlines by Contrastive Learning. *Findings of the European Chapter of the Association for Computational Linguistics (EACL)*, 2023. (to appear, BK IF=2)

2. Yingdan Lu, Jack Schaefer, **Kunwoo Park**, Jungseock Joo, Jennifer Pan. How Information Flows from the World to China. *The International Journal of Press/Politics*, 2022. (IF=4.495)

3. Haewoon Kwak, Jisun An, **Kunwoo Park**. Who is Missing? Characterizing Participation of Different Demographic Groups in a Korean Nationwide Daily Conversation Corpus. *The International AAAI Conference on Web and Social Media (ICWSM)*, 2022.

4. Hyewon Choi, Yejun Yoon, Seunghyun Yoon, **Kunwoo Park**†. How does fake news use a thumbnail? CLIP-based Multimodal Detection on the Unrepresentative News Image. *ACL workshop on Combating Online Hostile Posts in Regional Languages during Emergency Situation (ACL-W)*, 2022.

5. Hyeonho Song, **Kunwoo Park**†, Meeyoung Cha. Finding epic moments in live content through deep learning on collective decisions. *EPJ Data Science*, 2021. (IF=4.333)

6. **Kunwoo Park**, Zhufeng Pan, Jungseock Joo. Who Blames or Endorses Whom? Entity-to-Entity Directed Sentiment Extraction in News Text. *Findings of the Annual Meetings of the Association for Computational Linguistics (ACL)*, 2021. (BK IF=4)

7. **Kunwoo Park**, Haewoon Kwak, Jisun An, and Sanjay Chawla. How-to Present News on Social Media: A Causal Analysis of Editing News Headlines for Boosting User Engagement. *The International AAAI Conference on Web and Social Media (ICWSM)*, 2021.

8. **Kunwoo Park***, Seunghyun Yoon*, Minwoo Lee, Taegyun Kim, Meeyoung Cha, and Kyomin Jung. Learning to Detect Incongruence in News Headline and Body Text via a Graph Neural Network. *IEEE Access*, 2021. (IF=3.745)
Featured in KBS and Mathematics Donga (in Korean).

9. **Kunwoo Park***, Yu-i Ha*, Su Jung Kim, Jungseock Joo, and Meeyoung Cha. Automatically Detecting Image-Text Mismatch on Instagram with Deep Learning. *Journal of Advertising*, 2021. (IF=6.302)

10. Danni Chen, **Kunwoo Park**, and Jungseock Joo. Understanding Gender Stereotypes and Electoral Success from Visual Self-presentations of Politicians in Social Media. *The ACM Multimedia Workshop on Media Analytics for Societal Trends (MM-W)*, 2020.

11. **Kunwoo Park**, Taegyun Kim, Seunghyun Yoon, Meeyoung Cha, and Kyomin Jung. BaitWatcher: A Lightweight Web Interface for the Detection of Incongruent News Headlines. *Disinformation, Misinformation, and Fake News in Social Media: Emerging Research Challenges and Opportunities (Book chapter)*, Springer, 2020.

12. **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. *The International AAAI Conference on Web and Social Media (ICWSM)*, 2020. (AR=20%)

13. Jeongmin Kim, **Kunwoo Park**, Hyeonho Song, Jaimie Yejean Park, and Meeyoung Cha. Learning How Spectator Reactions Affect Popularity on Twitch. *IEEE International Conference on Big Data and Smart Computing (BigComp)*, 2020. (AR=23.7%)

14. **Kunwoo Park***, Seunghyun Yoon*, Joongbo Shin, Hongjun Lim, Seungpil Won, Meeyoung Cha, and Kyomin Jung. Detecting Incongruity Between News Headline and Body Text via a Deep Hierarchical Encoder. *The AAAI Conference on Artificial Intelligence (AAAI)*, 2019. (BK IF=4, AR=16.2%)
Featured in YTN, Channel A, Joong daily, and many others (in Korean).

15. **Kunwoo Park**, Meeyoung Cha, and Eunhee Rhim. Positivity Bias in Customer Satisfaction Ratings. *The Web Conference (WWW)*, 2018. (BK IF=4, AR=17%)
Featured in etnews (in Korean).

16. **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. *The International Conference on World Wide Web (WWW)*, 2017. (BK IF=4, AR=17%)

17. **Kunwoo Park**, Ingmar Weber, Meeyoung Cha, and Chul Lee. Persistent Sharing of Fitness App Status on Twitter. *The ACM International Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, 2016. (BK IF=3, AR=25%)
   Featured in Mathematics Donga (in Korean).

18. **Kunwoo Park**, Jaewoo Kim, Jaram Park, Meeyoung Cha, Jiin Nam, Seunghyun Yoon, and Eunhee Rhim. Mining the Minds of Customers from Online Chat Logs. *The ACM International Conference on Information and Knowledge Management (CIKM)*, 2015. (BK IF=3, AR=25%)

19. 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. *The International Conference on World Wide Web (WWW)*, 2014.

20. **Kunwoo Park**, Jaram Park, SungKyu Park, Jaewoo Kim, Sejeong Kwon, Jinah Kwak, and Meeyoung Cha. Voice of the Employees Resonated in Online Bamboo Forests. *The International AAAI Conference on Web and Social Media Workshop on Social Computing for Workforce 2.0 (ICWSM-W)*, 2013.

21. **Kunwoo Park**, Seonggyu Lee, Eunae Kim, Minjee Park, Juyong Park, and Meeyoung Cha. Mood and Weather: Feeling the Heat? *The International AAAI Conference on Web and Social Media (ICWSM)*, 2013. (AR=21%)

22. **Kunwoo Park***, Jing-Kai Lou*, Meeyoung Cha, Juyong Park, Chin-Laung Lei, and Kuan-Ta Chen. Gender Swapping and User Behaviors in Online Social Games. *The International Conference on World Wide Web (WWW)*, 2013. (BK IF=4, AR=15%)
   Featured in Mathematics Donga (in Korean).

PEER-REVIEWED DOMESTIC PUBLICATIONS

1. Hyeonho Song, **Kunwoo Park** and Meeyoung Cha. An Embedding Method of Emotes for the Detection of Popular Clips on Twitch.tv. *In Journal of KIISE*, 2020.

2. **Kunwoo Park** and Meeyoung Cha. Churn Analysis of Max Level Users in Online Games. *In Journal of KIISE*, 2017.
   Featured in YTN, ThisIsGame, and many more (in Korean).

TEACHING EXPERIENCES

Data Science (2023 Spring)

Deep Learning and Natural Language Processing (2022 Fall)

AI-based Thinking and Problem Solving Skills (2022 Spring, 2021 Spring)

C Programming and Exercises (2021 Fall)

Discrete Mathematics (2021 Fall, 2022 Fall)

Engineering Mathematics (2021 Spring)

HONORS

Best PC Award, ICWSM	Jun. 2021
Best PC Award, The Web Conference	Apr. 2021
The Outstanding PhD Thesis Award, School of Computing, KAIST	Feb. 2018
Special Prize (the 1st place among college teams), R&D Competition at Artificial Intelligence, Ministry of Science and ICT, Republic of Korea	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