Kunwoo Park

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School of AI Convergence, Soongsil University, Seoul, South Korea CURRENT Mar. 2021 - Present **POSITION** Assistant professor Principal Investigator of the Human-Centered Language and Information Technologies (HUMANE) Lab. RESEARCH **Human-Centered NLP** Vision Language Multimodal AI for Social Good INTEREST KAIST, Daejeon, South Korea **EDUCATION** 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 Postdoctoral Researcher at University of California, Los Angeles, USA Mar. 2020 - Feb. 2021 RESEARCH **EXPERIENCES** 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 ACADEMIC Co-tutorial chair at FAccT (2022), session chair at KDD (2021). **SERVICES** Program committee (reviewer) at AAAI (2021-2025), ACL (2021-2024), EACL (2023-2024), EMNLP (2021-2024)

2024), KDD (2021-2024), AACL (2022), WebConf (2021-2025), WSDM (2022-2025) ICWSM (2015-2024), and SocialNLP (2021-2024).

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

* indicates an equal contribution.

PEER-REVIEWED INTERNATIONAL PUBLICATIONS

- 1. Yejun Yoon, Seunghyun Yoon, and **Kunwoo Park**. Assessing News Thumbnail Representativeness: Counterfactual text can enhance the cross-modal matching ability, *Annual Meetings for Association for Computational Linguistics (ACL)*, 2024. (BK IF=4)
 - Featured in 조선일보, 한겨례 등 다수 (in Korean).
- 2. Fan Huang, Haewoon Kwak, **Kunwoo Park**, and Jisun An. ChatGPT Rates Natural Language Explanation Quality Like Humans: But on Which Scales? *The Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING)*, 2024. (BK IF=2)
- 3. Seonyeong Song, Jiyoung Han, and **Kunwoo Park**. A Data-Centric Contrastive Embedding Framework for Contextomized Quote Detection. *IEEE Access*, 2024. (IF=3.9)
- Chaewon Park, Soohwan Kim, Kyubyong Park, and Kunwoo Park. K-HATERS: A Hate Speech Detection Corpus in Korean with Target-Specific and Fine-Grained Ratings. The 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023. (BK IF=3)

 Featured in IT Daily (in Korean).
- 5. **Kunwoo Park** and Jungseock Joo. Perceived masculinity from Facebook photographs of candidates predicts electoral success. EPJ Data Science. (IF=3.63)
- 6. Seonyeong Song, Hyeonho Song, **Kunwoo Park***, Jiyoung Han*, and Meeyoung Cha. Detecting Contextomized Quotes in News Headlines by Contrastive Learning. *The 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL)*, 2023. (BK IF=2)
- 7. Yingdan Lu, Jack Schaefer, **Kunwoo Park**, Jungseock Joo, and Jennifer Pan. How Information Flows from the World to China. *The International Journal of Press/Politics*, 2022. (IF=4.495)
- 8. Haewoon Kwak, Jisun An, and **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.
- 9. Hyewon Choi, Yejun Yoon, Seunghyun Yoon, and **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.
- 10. Hyeonho Song, **Kunwoo Park***, and Meeyoung Cha*. Finding epic moments in live content through deep learning on collective decisions. *EPJ Data Science*, 2021. (IF=4.333)
- 11. **Kunwoo Park**, Zhufeng Pan, and Jungseock Joo. Who Blames or Endorses Whom? Entity-to-Entity Directed Sentiment Extraction in News Text. *Annual Meetings of the Association for Computational Linguistics (ACL)*, 2021. (BK IF=4)
- 12. **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.
- 13. Seunghyun Yoon*, **Kunwoo Park***, 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 수학동아 (in Korean).
- 14. Yu-i Ha*, **Kunwoo Park***, 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)
- 15. 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.
- 16. **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.
- 17. **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%)

- 18. 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%)
- 19. **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).
- 20. **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 전자신문 (in Korean).
- 21. **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%)
- 22. **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 수학동아 (in Korean).
- 23. **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%)
- 24. 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.
- 25. **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.
- 26. **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%)
- 27. 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. *The International Conference on World Wide Web (WWW)*, 2013. (BK IF=4, AR=15%)
 - Featured in 수학동아 (in Korean).

PEER-REVIEWED PUBLICATIONS (IN KOREAN)

- 1. 정현우, **박건우**. 대규모 언어 모델의 소수 검증 능력 심층 평가: ChatGPT와 PaLM 2를 중심으로. *정보과학회논문지*, 2024.
- 2. 정현우, **박건우**. 대규모 언어 모델의 소수 검증 능력 심층 평가. KSC, 2023.
- 3. 송선영, 안제준, **박건우**. 자동화 팩트체킹을 위한 대조학습 방법. 정보과학회논문지, 2023.
- 4. 윤예준, 정현우, 윤승현, **박건우**. 뉴스 이미지 대표성 파악을 위한 다국어 CLIP 기반 대조학습 프레임 워크: 국·영문 교차 언어 실험. *KCC*, 2023.
- 5. 안제준, **박건우**. 초거대 언어 모델 요약문을 활용한 경량 요약 방법. KSC, 2022.
- 6. 박건우. 자연어처리 모델의 예측 편향, 어디에서 왔을까?. 정보과학회지, 2022.
- 7. 윤예준, **박건우**, 윤승현. 기사 내용과 관련 없는 대표 이미지를 사용하는 뉴스 기사 탐지:다국어 CLIP을 활용하여. *KCC*, 2022.
- 8. 송선영, **박건우**, 한지영, 차미영. 텍스트 분류 모델의 예측 편향 감소 방법론:한국어 뉴스 인용구 감성 분석 사례를 중심으로. *KCC*, 2022.
- 9. 박채원, **박건우**. 텍스트 분류를 위한 질문 형태의 데이터 증강 기법. KCC, 2022.
- 10. 송현호, **박건우**, 차미영. 인기 클립 탐지를 위한 트위치 이모트 임베딩 방법. *정보과학회논문지*, 2020.
- 11. **박건우**, 차미영. 온라인 게임 내 최고 레벨 유저의 이탈 분석. *정보과학회논문지*, 2017. YTN, 디스이즈게임 등 다수 언론 보도.

TEACHING EXPERIENCES

At Soongsil University

Introduction to Artificial Intelligence (2024 Fall) Natural Language Processing (2024 Fall, 2023 Fall)

Data Science (2024 Spring, 2023 Spring)

Deep Learning and Natural Language Processing (2024 Spring, 2022 Fall) AI-based Thinking and Problem Solving Skills (2022 Spring, 2021 Spring)

C Programming and Exercises (2021 Fall) Discrete Mathematics (2022 Fall, 2021 Fall) Engineering Mathematics (2021 Spring)

Honors

2nd place, AVeriTeC shared task, FEVER workshop (co-located with EMNLP 2024).	Aug. 2024
Outstanding Paper Award, Korea Software Congress.	Dec. 2023
Best Paper Award, Korean Artificial Intelligence Association.	Jul. 2023
Outstanding Presentation Award, Korea Computer Congress.	Jun. 2022
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
Smart Award, IBM Smarter Planet Contest, IBM Korea.	Oct. 2010

REFERENCES

Dr. Meeyoung Cha (Scientific Director/Professor at MPI-SP/KAIST, mia.cha@mpi-sp.org)

Dr. Jungseock Joo (Associate professor at UCLA, jjoo@comm.ucla.edu)

Dr. Haewoon Kwak (Associate professor at Indiana University, haewoon@acm.org)