### Kunwoo Park

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CURRENT POSITION

School of AI Convergence, Soongsil University, Seoul, South Korea

Mar. 2021 - Present

Assistant professor

Principal Investigator of Human-Centered Language and Data Intelligence (HUMANE) Lab.

### RESEARCH INTEREST

### Language Intelligence Data Science AI for Social Good Computational Social Science

My interdisciplinary research lies at the intersection of language intelligence, data science, and social science. I am broadly interested in addressing societal challenges, with recent work focusing on misinformation and social bias, issues that can be propagated by both humans and generative AI. To tackle these challenges, I formulates technical problems through dataset curation, develops language-oriented AI methods aligned with human perspectives, and applies these methods to real-world data. My work has been published in leading venues in NLP, data science, and interdisciplinary research, including ACL, WWW, and ICWSM.

#### **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
- Thesis: Gender swapping and its effects in MMORPGs

Kwangwoon University, Seoul, South Korea

Feb. 2012

Mar. 2020 - Feb. 2021

B.S. in Computer Science

RESEARCH
EXPERIENCES

Postdoctoral Researcher at University of California,	, Los Angeles, USA
Advisor: Jungseock Ioo	

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 SERVICES

Area chair at ACL Rolling Review (2025-present), Co-tutorial chair at FAccT (2022), Session chair at KDD (2021).

Program committee (reviewer) at AAAI (2021-2025), \*ACL (2021-2024), WebConf (2021-2025), WSDM (2022-2025), KDD (2021-2024), ICWSM (2015-2024), FEVER (2024-2025), SocialNLP (2021-2024), etc.

Reviewer at Palgrave Communications, Online Information Review, Journal of Advertising, Information Processing and Management, EPJ Data Science, Computational Communication Research, IEEE/ACM Transactions on Audio/Speech/Language Processing, etc.

\* indicates an equal contribution.

# PEER-REVIEWED INTERNATIONAL PUBLICATIONS

- 1. Yejun Yoon, Jaeyoon Jung, Seunghyun Yoon, and **Kunwoo Park**. Team HUMANE at AVeriTeC 2025: HerO 2 for Efficient Fact Verification, *to appear at ACL 2025 Workshop (FEVER)*.
- 2. Yejun Yoon, Jaeyoon Jung, Seunghyun Yoon, and **Kunwoo Park**. Hypothetical Documents or Knowledge Leakage? Rethinking LLM-based Query Expansion, to appear at ACL 2025.
- 3. Yejun Yoon, Jaeyoon Jung, Seunghyun Yoon, and **Kunwoo Park**. HerO at AVeriTeC: The Herd of Open Large Language Models for Verifying Real-World Claims, *EMNLP workshop on the Fact Extraction and VERification*, 2024.
  - Featured in Hankyoreh and many others (in Korean).
- 4. 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 Chosun Daily, Hankyoreh, and many others (in Korean).
- 5. 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)
- 6. Seonyeong Song, Jiyoung Han, and **Kunwoo Park**. A Data-Centric Contrastive Embedding Framework for Contextomized Quote Detection. *IEEE Access*, 2024. (IF=3.9)
- 7. 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).
- 8. **Kunwoo Park** and Jungseock Joo. Perceived masculinity from Facebook photographs of candidates predicts electoral success. EPJ Data Science. (IF=3.63)
- 9. 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)
- 10. 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)
- 11. 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. (A-tier by KIISE)
- 12. 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.
- 13. 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)
- 14. **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)
- 15. **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. (A-tier by KIISE)
- 16. 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 Math DongA (in Korean).
- 17. 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)

- 18. 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.
- 19. 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.
- 20. 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%, A-tier by KIISE)
- 21. 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%)
- 22. 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. (AR=16.2%, BK IF=4) - Featured in YTN, JoongAng Daily, and many others (in Korean).
- 23. Kunwoo Park, Meeyoung Cha, and Eunhee Rhim. Positivity Bias in Customer Satisfaction Ratings. The Web Conference (WWW), 2018. (AR=17%, BK IF=4)
  - Featured in Electronic Times (in Korean).
- 24. 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. (AR=17%, BK IF=4)
- 25. 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. (AR=25%, BK IF=3)
  - Featured in Math DongA (in Korean).
- 26. 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. (AR=25%, BK IF=3)
- 27. 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.
- 28. 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.
- 29. 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%, A-tier by KIISE)
- 30. 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. (AR=15%, BK IF=4)
  - Featured in Math DongA (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.

#### INVITED TALKS

- 1. Language Models for Social Good: Tackling Misinformation and Bias. KDI School, June 2025.
- 2. 온라인 사회 문제 해결: AI에 의한, AI를 위한. 카카오 공공선 포럼, Seongnam, June 2024.
- 3. Guest lecture, Kwangwoon University, November 2023.
- 4. AI for Journalism: Task-Adaptive Contrastive Learning for Understanding News Snippet Representativeness. KAIST (online), October 2023.
- 5. Task-Adaptive Contrastive Learning for Assessing News Snippet Representativeness. UNIST ( \(\partial\) online), October 2023.
- 6. By the AI, for the AI: Tackling misinformation and social bias. Korea Computer Congress, June 2023.
- 7. AI for Journalism and media studies. Guest lecture, Sungkyunkwan University, May 2022.
- 8. Data-Centric Contrastive Learning for Representativeness of News Snippets. Institute of Basic Science, April 2022.
- 9. Guest lecture at CS564, KAIST (online), April 2022.
- 10. KAIST AI+X Forum: Meet the data scientists. KAIST, December 2021.
- 11. NLP-based efforts for tackling misinformation in online news media. Kyung Hee University (online), November 2021.
- 12. 뉴스 진위성 탐지 연구 동향 소개. Saltlux, May 2021.
- 13. Detecting Incongruent News Headlines by Domain-Specific Neural Architectures. Institute of Basic Science (online), April 2021.
- 14. How to be successful in social media? A causal analysis of 8 media's news sharing practices on Twitter. C+J Symposium (online), February 2021.
- 15. Guest lecture at Comm188C, UCLA (online), May 2020.
- 16. Hands-on Experiences on Attention-based RNN. IBS Deep Learning Summer School, Institute of Basic Science, June 2019.
- 17. Detecting Misleading Headlines in Online News. QCAI Deep Engineering Week, Qatar Computing Research Institute, May 2019.

### TEACHING EXPERIENCES

At Soongsil University

Introduction to Artificial Intelligence	2025 Fall, 2024 Fall
Natural Language Processing	2025 Fall, 2024 Fall, 2023 Fall
Data Science	2025 Spring, 2024 Spring, 2023 Spring
Deep Learning and Natural Language Processing	2025 Spring, 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 ACL 2025).	Jul. 2025
2nd place, AVeriTeC shared task, FEVER workshop (co-located with EMNLP 2024).	Nov. 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)