Minbyul Jeong

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Experience

Upstage   Aug. 2024 – Current
Principal Researcher Scientist of Large Language Model Team   *Seoul*

Education

Korea University   Mar. 2019 – Aug. 2024
Ph.D (MS Integrated) Student, Computer Science & Engineering   *Seoul*

Korea University   Mar. 2015 – Feb. 2019
B.Sc., Computer Science & Engineering   *Seoul*

Awards & Honors

BioASQ 9B   **1st place**
A challenge on large-scale biomedical semantic indexing and question answering   *2021*

BioASQ 8B   **1st place**
A challenge on large-scale biomedical semantic indexing and question answering   *2020*

BioASQ 7B   **1st place**
A challenge on large-scale biomedical semantic indexing and question answering   *2019*

Publications

[C14] Yein Park, Chanwoong Yoon, Jungwoo Park, Donghyeon Lee, **Minbyul Jeong**[†] and Jaewoo Kang[†], "ChroKnowledge: Unveiling Chronological Knowledge of Language Models in Multiple Domains". In: Proceedings of ICLR 2025. [Github] [Paper] [Homepage]

[C13] Chanwoong Yoon, Taewhoo Lee, Hyeon Hwang, **Minbyul Jeong**[†], and Jaewoo Kang[†], "CompAct: Compressing Retrieved Documents Actively for Question Answering". In: Proceedings of EMNLP 2024. [Github] [Paper]

[C12] Minbyul Jeong, Jiwoong Sohn, Mujeen Sung, Jaewoo Kang, "Improving Medical Reasoning through Retrieval and Self-Reflection with Retrieval-Augmented Large Language Models". In: Proceedings of ISMB 2024. (Bioinformatics 2024, 40, Supplementary_1, i119-i129) [Github] [Paper]

[C11] Minbyul Jeong, Jaewoo Kang, "Consistency enhancement of model prediction on document-level named entity recognition". Bioinformatics 2023. [Github] [Paper]

[C10] Mujeen Sung*, **Minbyul Jeong***, Yonghwa Choi, Donghyeon Kim, Jinhyuk Lee, Jaewoo Kang, "BERN2 an advanced neural biomedical named entity recognition and normalization tool". Bioinformatics 2022. (33,351,060 API calls from 118 countries across 2,919 organizations) [Github] [Paper] [Homepage]

[C9] Seongjun Yun, **Minbyul Jeong**, Sungdong Yoo, Seunghun Lee, SeanS. Yi, Raehyun Kim, Jaewoo Kang, Hyunwoo J. Kim, "Graph Transformer Networks Learning Meta-path Graphs to Improve GNNs". Neural Networks 2022. [Github] [Paper]

[C8] Wonjin Yoon, Jaehyo Yoo, Sumin Seo, Mujeen Sung, **Minbyul Jeong**, Gangwoo Kim, Jaewoo Kang, "Data-Centric and ModelCentric Approaches for Biomedical Question Answering". In: Proceedings of CLEF 2021. [Github] [Paper]

[C7] Meijun Liu, Yi Bu, Chongyan Chen, Jian Xu, Daifeng Li, Yan Leng, Richard Barry Freeman, Eric Meyer, Wonjin Yoon, Mujeen Sung, **Minbyul Jeong**, Jinhyuk Lee, Jaewoo Kang, Chao Min, Min Song, Yujia Zhai, Ying Ding, "Pandemics are catalysts of scientific novelty: Evidence from COVID-19". Journal of the Association for Information Science and Technology (JASIS&T) 2022. [Paper]

[C6] Minbyul Jeong, Mujeen Sung, Gangwoo Kim, Donghyeon Kim, Wonjin Yoon, Jaehyo Yoo, Jaewoo Kang, "Transferability of Natural Language Inference to Biomedical Question Answering". In: Proceedings of CLEF 2020. [Github] [Paper]

[C5] Jinhyuk Lee, Sean S. Yi, **Minbyul Jeong**, Mujeen Sung, Wonjin Yoon, Yonghwa Choi, Miyoung Ko, Jaewoo Kang, "Answering Questions on COVID-19 in Real-Time". In: Proceedings of 1st Workshop on NLP for COVID-19 (Part 2) at EMNLP 2020. [Github] [Paper]

[C4] Jian Xu, Sunkyu Kim, Min Song, **Minbyul Jeong**, Donghyeon Kim, Jaewoo Kang, Justing F. Rousseau, Xin Li, Weijia Xu, Vetle I. Torvik, Yi Bu, Chongyan Chen, Islam Akef Ebeid, Daifeng Li, Ying Ding "Building a PubMed knowledge graph". Scientific Data 2020. [Paper]

[C3] Seongjun Yun, **Minbyul Jeong**, Raehyun Kim, Jaewoo Kang, Hyunwoo J. Kim, "Graph Transformer Networks", In: Proceedings of NeurIPS 2019. [Github] [Paper]

[C2] Wonjin Yoon, Jinhyuk Lee, Donghyeon Kim, **Minbyul Jeong**, Jaewoo Kang, "Pre-trained Language Model for Biomedical Question Answering". In: Proceedings of ECML PKDD 2019. [Github] [Paper]

[C1] Donghyeon Kim, Jinhyuk Lee, Chan Ho So, Hwisang Jeon, **Minbyul Jeong**, Yonghwa Choi, Wonjin Yoon, Mujeen Sung, Jaewoo Kang, *"BERN: A neural named entity recognition and multi-type normalization tool for biomedical text mining"*. IEEE Access 2019. [Github] [Paper]

Preprints

[P5] Yein Park, Chanwoong Yoon, Jungwoo Park, **Minbyul Jeong**[†], and Jaewoo Kang[†], "Does Time Have Its Place? Temporal Heads: Where Language Models Recall Time-specific Information". arXiv preprint. 2025.

[P4] Minbyul Jeong[†], Jungho Cho, Minsoo Khang, Dawoon Jung, and Teakgyu Hong, "System Message Generation for User Preferences using Open-Source Models". arXiv preprint. 2025. [Paper]

[P3] Minbyul Jeong, Hyeon Hwang, Chanwoong Yoon, Taewhoo Lee, and Jaewoo Kang, "OLAPH: Improving Factuality in Biomedical Long-form Question Answering". arXiv preprint. 2024.[Github] [Paper] [Youtube]

[P2] Minbyul Jeong, Jaewoo Kang, "Regularization for Long Named Entity Recognition". arXiv preprint. 2021.[Github] [Paper]

[P1] Raehyun Kim, Chan Ho So, **Minbyul Jeong**, Sanghoon Lee, Jinkyu Kim, Jaewoo Kang, "HATS: A Heirarchical Graph Attention Network for Stock Movement Prediction". arXiv preprint. 2019.[Github] [Paper]

Reviewer

Conferences:

- Conference on Neural Information Processing Systems (2024)
- International Conference on Learning Representations (2024)
- Empirical Methods in Natural Language Processing (2024)
- North American Chapter of the Association for Computational Linguistics (2024)

Journals:

- Experimental & Theoretical Artificial Intelligence (2024)
- Neural Networks (2023)
- Knowledge-Based Systems (2023)
- Applied Intelligence (2022, 2023)
- Data Technologies and Applications (2022)