

**Yixin CAO**

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**Education**

PhD, Tsinghua University, China, 2018  
Master of Engineering, Beijing Institute of Technology, China, 2012  
Bachelor of Engineering, Nanchang University, China, 2009

**Academic Appointments**

Assistant Professor of Computer Science, School of Computing and Information Systems, SMU, Jan 2022 - Present

**RESEARCH**

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**Research Interests**

I would like to contribute fundamental breakthroughs to the natural language processing and knowledge engineering communities, helping researchers to better manage the knowledge in texts. I hope to enable the foundation models, i.e., large pre-trained language models (LLMs), to do trustworthy predictions in terms of correct factual knowledge, responsible commonsense knowledge, and logical knowledge reasoning. There are three directions in his mind. 1) Understanding the knowledge from LLMs. 2) Attribute the knowledge in LLMs. 3) Improving the reasoning ability of LLMs.

**Publications**Journal Articles [Refereed]

Screening through a broad pool: Towards better diversity for lexically constrained text generation, by YUAN, Changsen; HUANG, Heyan; CAO, Yixin; CAO, Qianwen. (2024). *Information Processing and Management*, 61 (2), 1-12. <https://doi.org/10.1016/j.ipm.2023.103602> (Published)

Collective prompt tuning with relation inference for document-level relation extraction, by YUAN, Changsen ; CAO, Yixin ; HUANG, Heyan. (2023). *Information Processing and Management*, 60 (5), <https://doi.org/10.1016/j.ipm.2023.103451> (Published)

Document-level Relation Extraction via Separate Relation Representation and Logical Reasoning, by HUANG, Heyan; YUAN, Changsen; LIU, Qian; CAO, Yixin . (2024). *ACM Transactions on Information Systems*, 42 (1), 1-24. <https://doi.org/10.1145/3597610> (Published)

Learning relation prototype from unlabeled texts for long-tail relation extraction, by CAO, Yixin; KUANG, Jun; GAO, Ming; ZHOU, Aoying; WEN, Yonggang; CHUA, Tat-Seng. (2021). *IEEE Transactions on Knowledge and Data Engineering*, 35 (2), 1-14. <http://doi.org/10.1109/TKDE.2021.3096200> (Published)

### Conference Proceedings

Benchmarking foundation models with language-model-as-an-examiner, by BAI, Yushi; YING, Jiahao; CAO, Yixin; LV, Xin; HE, Yuze; WANG, Xiaozhi; YU, Jifan; ZENG, Kaisheng; XIAO, Yijia; LYU, Haozhe; ZHANG, Jiayin; LI, Juanzi; HOU, Lei. (2023.0). *Proceedings of the 37th Conference on Neural Information Processing, New Orleans, United States, December 12-14*, California: Neural information processing systems foundation. (Published)

Examining the Inter-consistency of large language models: An in-depth analysis via debate, by XIONG, Kai; DING, Xiao; CAO, Yixin; LIU, Ting; QIN, Bing. (2023.0). *Findings of the Association for Computational Linguistics: EMNLP 2023, Singapore, December 6-10*, (pp. 1-19) Singapore: Association for Computational Linguistics. (Published)

A comprehensive evaluation of large language models on legal judgment prediction, by SHUI, Ruihao; CAO, Yixin; WANG, Xiang; CHUA, Tat-Seng. (2023.0). *Findings of the Association for Computational Linguistics: EMNLP 2023, Singapore, December 6-10*, (pp. 7337-7348) Singapore: Association for Computational Linguistics. <https://doi.org/10.18653/v1/2023.findings-emnlp.490> (Published)

Robust prompt optimization for large language models against distribution shifts, by LI, Moxin; WANG, Wenjie; FENG, Fuli; CAO, Yixin; ZHANG, Jizhi; CHUA, Tat-Seng. (2023.0). *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing, Singapore, December 6-10*, (pp. 1539-1554) Singapore: Association for Computational Linguistics. (Published)

MolCA: Molecular graph-language modeling with cross-modal projector and uni-modal adapter, by LIU, Zhiyuan; LI, Sihang; LUO, Yanchen; FEI, Hao; CAO, Yixin; KAWAGUCHI, Kenji; WANG, Xiang; CHUA, Tat-Seng. (2023.0). *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing, Singapore, December 6-10*, (pp. 15623-15638) Singapore: Association for Computational Linguistics. <https://doi.org/10.18653/v1/2023.emnlp-main.966> (Published)

CoVariance-based causal debiasing for entity and relation extraction, by REN, Lin; LIU, Yongbin; CAO, Yixin; OUYANG, Chunping. (2023.0). *Findings of the Association for Computational Linguistics: EMNLP 2023, Singapore, December 6-10*, (pp. 2627-2640) Singapore: Association for Computational Linguistics. <https://doi.org/10.18653/v1/2023.findings-emnlp.173> (Published)

FollowupQG: Towards information-seeking follow-up question generation, by MENG, Yan; PAN, Liangming; CAO, Yixin; KAN, Min-Yen. (2023.0). *Proceedings of the 13th International Joint Conference on Natural Language Processing and the 3rd Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics, Bali, Indonesia, November 1-4*, (pp. 1-20) New York: Association for Computational Linguistics. (Published)

Constructing holistic spatio-temporal scene graph for video semantic role labeling, by ZHAO, Yu; FEI, Hao; CAO, Yixin; LI, Bobo; ZHANG, Meishan; WEI, Jianguo; ZHANG, Min; CHUA, Tat-Seng. (2023.0). *MM '23: Proceedings of the 31st ACM International Conference on Multimedia, Ottawa, October 29 - November 3*, (pp. 5281-5291) New York: ACM. <https://doi.org/10.1145/3581783.3612096> (Published)

Context-aware event forecasting via graph disentanglement, by MA, Yunshan; YE, Chenchen; WU, Zijian; WANG, Xiang; CAO, Yixin; CHUA, Tat-Seng. (2023.0). *Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, (pp. 1643-1652) United States: ACM. <https://doi.org/10.1145/3580305.3599285> (Published)

Few-shot event detection: An empirical study and a unified view, by MA, Yubo; WANG, Zehao; CAO, Yixin; SUN, Aixin. (2023.0). *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics, ACL 2023, Toronto, Canada, July 9-14*, (pp. 11211-11236) Texas: ACL. (Published)

Discriminative reasoning with sparse event representation for document-level event-event relation extraction, by YUAN, Changsen; HUANG, Heyan; CAO, Yixin; WEN, Yonggang. (2023.0). *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics, ACL 2023, Toronto, Canada, July 9-14*, (pp. 16222-16234) Texas: ACL. (Published)

Information screening whilst exploiting! multimodal relation extraction with feature denoising and multimodal topic modeling, by WU, Shengqiong; FEI, Hao; CAO, Yixin; BING, Lidong; CHUA, Tat-Seng.

(2023.0). *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics*, (pp. 14734-14751) Canada: Association for Computational Linguistics. <https://doi.org/10.18653/v1/2023.acl-long.823> (Published)

Take a break in the middle: Investigating subgoals towards hierarchical script generation, by LI, Xinze; CAO, Yixin; CHEN, Muhao; SUN, Aixin. (2023.0). *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics, ACL 2023, Toronto, Canada, July 9-14*, (pp. 10129-10147) Texas: ACL. (Published)

CHEER: Centrality-aware high-order event reasoning network for document-level event causality identification, by CHEN, Meiqi; CAO, Yixin; ZHANG, Yan; LIU, Zhiwei. (2023.0). *Proceedings of The 61st Annual Meeting of the Association for Computational Linguistics*, (pp. 10804-10816) Canada: ACM. <https://doi.org/10.18653/v1/2023.acl-long.604> (Published)

Knowledge graph embedding by normalizing flows, by XIAO, Changyi; HE, Xiangnan; CAO, Yixin. (2023.0). *Proceedings of the 37th AAAI Conference on Artificial Intelligence, AAAI 2023, Washington, DC, February 7-14*

, (pp. 4756-4764) Piscataway, NJ: IEEE. (Published)

R2F: A general retrieval, reading and fusion framework for document-level natural language inference, by WANG, Hao; CAO, Yixin; LI, Yangguang; HUANG, Zhen; WANG, Kun; SHAO, Jing. (2022.0). *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing EMNLP, Abu Dhabi, December 7-11*, (pp. 3122-3134) Abu Dhabi: ACL. (Published)

Interactive contrastive learning for self-supervised entity alignment, by ZENG, Kaisheng; DONG, Zhenhao; HOU, Lei; CAO, Yixin; HU, Minghao; YU, Jifan; LV, Xin; CAO, Lei; WANG, Xin; LIU, Haozhuang; HUANG, Yi; WAN, Jing; LI, Juanzi. (2022.0). *Proceedings of the 31st ACM International Conference on Information and Knowledge Management, Atlanta, Georgia, 2022 October 17-21*, (pp. 2465-2475) Atlanta, Georgia: ACM. <https://doi.org/10.1145/3511808.3557364> (Published)

ERGO: Event relational graph transformer for document-level event causality identification, by CHEN, Meiqi; CAO, Yixin; DENG, Kunquan; LI, Mukai; WANG, Kun; SHAO, Jing; ZHANG, Yan. (2022.0). *Proceedings of the 29th International Conference on Computational Linguistics, Gyeongju, South Korea, 2022 October 12-17*, (pp. 2118-2128) Gyeongju, South Korea: Association for Computational Linguistics. <https://aclanthology.org/2022.coling-1.185> (Published)

TGDM: Target Guided Dynamic Mixup for cross-domain few-shot learning, by ZHUO, Linhai; FU, Yuqian; CHEN, Jingjing; CAO, Yixin; JIANG, Yu-Gang. (2022.0). *Proceedings of the 30th ACM International Conference on Multimedia, Lisboa, Portugal, 2022 October 10-14*, (pp. 6368-6376) Lisboa, Portugal: ACM. <http://doi.org/10.1145/3503161.3548052> (Published)

DocEE: A large-scale and fine-grained benchmark for document-level event extraction, by TONG, Meihan; XU, Bin; WANG, Shuai; HAN, Meihuan; CAO, Yixin; ZHU, Jiangqi; CHEN, Siyu; HOU, Lei; LI, Juanzi. (2022.0). *Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Seattle, July 10-15*, (pp. 3970-3982) Seattle, WA: Association for Computational Linguistics. <http://doi.org/10.18653/v1/2022.naacl-main.291> (Published)

What makes the story forward?: Inferring commonsense explanations as prompts for future event generation, by LIN, Li; CAO, Yixin; HUANG, Lifu; LI, Shu Ang; HU, Xuming; WEN, Lijie; WANG, Jianmin. (2022.0). *SIGIR '22: Proceedings of the 45th ACM SIGIR Conference on Research and Development in Information Retrieval, Madrid, July 11-15*, (pp. 1098-1109) New York: ACM. <https://doi.org/10.1145/3477495.3532080> (Published)

MMEKG: Multi-modal Event Knowledge Graph towards universal representation across modalities, by MA, Yubo; WANG, Zehao; LI, Mukai; CAO, Yixin; CHEN, Meiqi; LI, Xinze; SUN, Wenqi; DENG, Kunquan; WANG, Kun; SUN, Aixin; SHAO, Jing. (2022.0). *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics: System Demonstrations, Dublin, Ireland, 2022 May 22-27*, (pp. 231-239) Dublin, Ireland: Association for Computational Linguistics. <http://doi.org/10.18653/v1/2022.acl-demo.23> (Published)

Do pre-trained models benefit knowledge graph completion? A reliable evaluation and a reasonable approach, by LV, Xin; LIN, Yankai; CAO, Yixin; HOU, Lei; LI, Juanzi; LIU, Zhiyuan; LI, Peng; ZHOU, Jie. (2022.0). *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics: System Demonstrations, Dublin, Ireland, 2022 May 22-27*, (pp. 3570-3581) Kerrville, TX: ACL.

<https://doi.org/10.18653/v1/2022.findings-acl.282> (Published)

Prompt for extraction? PAIE: Prompting Argument Interaction for Event Argument Extraction, by MA, Yubo; WANG, Zehao; CAO, Yixin; LI, Mukai; CHEN, Meiqi; WANG, Kun; SHAO, Jing. (2022.0). *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics: System Demonstrations, Dublin, Ireland, 2022 May 22-27*, (pp. 6759-6774) Kerrville, TX: ACL. <https://doi.org/10.18653/v1/2022.acl-long.466> (Published)

Debiasing NLU models via causal intervention and counterfactual reasoning, by TIAN, Bing; CAO, Yixin; ZHANG, Yong; XING, Chunxiao. (2022.0). *Proceedings of the 36th AAAI Conference on Artificial Intelligence, Virtual Conference, February 22 - March 1*, (pp. 11376-11384) Virtual Conference: AAAI. <http://doi.org/10.1609/aaai.v36i10.21389> (Published)

Is multi-hop reasoning really explainable? Towards benchmarking reasoning interpretability, by LV, Xin; CAO, Yixin; HOU, Lei; LI, Juanzi; LIU, Zhiyuan; ZHANG, Yichi; DAI, Zelin. (2021.0). *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing, Virtual Conference, November 7-11*, (pp. 8899-8911) Virtual, Punta Cana: Association for Computational Linguistics (ACL). <http://doi.org/10.18653/v1/2021.emnlp-main.700> (Published)

Missing data imputation for solar yield prediction using temporal multi-modal variational auto-encoder, by SHEN, Meng; ZHANG, Huaizheng; CAO, Yixin; YANG, Fan; WEN, Yonggang. (2021.0). *Proceedings of the 29th ACM International Conference on Multimedia, Virtual Conference, 2021 October 20-24*, (pp. 2558-2566) Virtual Conference: Association for Computing Machinery, Inc. <http://doi.org/10.1145/3474085.3475430> (Published)

How knowledge graph and attention help? A qualitative analysis into bag-level relation extraction, by HU, Zikun; CAO, Yixin; HUANG, Lifu; CHUA, Tat-Seng. (2021.0). *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing, Virtual Conference, 2021 August 1-6*, (pp. 4662-4671) Virtual Conference: Association for Computational Linguistics (ACL). <http://doi.org/10.18653/v1/2021.acl-long.359> (Published)

Learning from miscellaneous other-class words for few-shot named entity recognition, by TONG, Meihan; WANG, Shuai; XU, Bin; CAO, Yixin; LIU, Minghui; HOU, Lei; LI, Juanzi. (2021.0). *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing, Virtual Conference, 2021 August 1-6*, (pp. 6236-6247) Virtual Conference: Association for Computational Linguistics (ACL). <https://aclanthology.org/2021.acl-long.487.pdf> (Published)

Are missing links predictable? An inferential benchmark for knowledge graph completion, by CAO, Yixin; JI, Xiang; LV, Xin; LI, Juanzi; WEN, Yonggang; ZHANG, Hanwang. (2021.0). *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing, Virtual Conference, 2021 August 1-6*, (pp. 6855-6865) Virtual Conference: Association for Computational Linguistics (ACL). <https://aclanthology.org/2021.acl-long.534.pdf> (Published)

Exploring and evaluating attributes, values, and structures for entity alignment, by LIU, Zhiyuan; CAO, Yixin; PAN, Liangming; LI, Juanzi; LIU, Zhiyuan; CHUA, Tat-Seng. (2020.0). *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing, Virtual Conference, November 16-20*, (pp. 6355-6364) Virtual Conference: Association for Computational Linguistics. <http://doi.org/10.18653/v1/2020.emnlp-main.515> (Published)

Tree-augmented cross-modal encoding for complex-query video retrieval, by YANG, Xun; DONG, Jianfeng; CAO, Yixin; WANG, Xun; WANG, Meng; CHUA, Tat-Seng. (2020.0). *Proceedings of the 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval, Virtual Conference, 2020 July 25-30*, (pp. 1339-1348) Virtual Conference: ACM. <http://doi.org/10.1145/3397271.3401151> (Published)

Improving event detection via open-domain event trigger knowledge, by TONG, Meihan; XU, Bin; WANG, Shuai; CAO, Yixin; HOU, Lei; LI, Juanzi; XIE, Jun. (2020.0). *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, Virtual Conference, 2020 July 5-10*, (pp. 5887-5897) Virtual Conference: Association for Computational Linguistics. <http://doi.org/10.18653/v1/2020.acl-main.522> (Published)

Expertise style transfer: A new task towards better communication between experts and laymen, by CAO, Yixin; SHUI, Ruihao; PAN, Liangming; KAN, Min-Yen; LU, Zhiyuan; CHUA, Tat-Seng. (2020.0). *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, Virtual Conference, 2020 July*

5-10, (pp. 1061-1071) Virtual Conference: Association for Computational Linguistics. <http://doi.org/10.18653/v1/2020.acl-main.100> (Published)

Improving neural relation extraction with implicit mutual relations, by KUANG, Jun; CAO, Yixin; ZHENG, Jianbing; HE, Xiangnan; GAO, Ming; ZHOU, Aoying. (2020.0). *Proceedings of the 36th IEEE International Conference on Data Engineering, Dallas, Texas, 2020 April 20-24*, (pp. 1021-1032) Dallas, Texas: IEEE. <https://doi.org/10.1109/ICDE48307.2020.00093> (Published)

Reinforced negative sampling over knowledge graph for recommendation, by WANG, Xiang; XU, Yaokun; HE, Xiangnan; CAO, Yixin; WANG, Meng; CHUA, Tat-Seng. (2020.0). *Proceedings of The World Wide Web Conference 2020, Taipei, Taiwan, April 20-24*, (pp. 99-109) Taipei, Taiwan: ACM. <http://doi.org/10.1145/3366423.3380098> (Published)

Image enhanced event detection in news articles, by TONG, Meihan; WANG, Shuai; CAO, Yixin; XU, Bin; LI, Juaizi; HOU, Lei; CHUA, Tat-Seng. (2020.0). *Proceedings of the 34th AAAI Conference on Artificial Intelligence, Virtual Conference, New York, 2020 February 7-12*, (pp. 9040-9047) New York: AAAI. <http://doi.org/10.1609/aaai.v34i05.6437> (Published)

Low-resource name tagging learned with weakly labeled data, by CAO, Yixin; HU, Zikun; CHUA, Tat-Seng; LIU, Zhiyuan; JI, Heng. (2019.0). *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing, Hong Kong, November 3-7*, (pp. 261-270) Hong Kong, China: Association for Computational Linguistics. <http://doi.org/10.18653/v1/D19-1025> (Published)

Semi-supervised entity alignment via joint knowledge embedding model and cross-graph model, by LI, Chengjiang; CAO, Yixin; HOU, Lei; SHI, Jiabin; LI, Juanzi; CHUA, Tat-Seng. (2019.0). *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing, Hong Kong, November 3-7*, (pp. 2723-2732) Hong Kong, China: Association for Computational Linguistics. <http://doi.org/10.18653/v1/D19-1274> (Published)

Who, where, and what to wear?: Extracting fashion knowledge from social media, by MA, Yunshan; YANG, Xun; LIAO, Lizi; CAO, Yixin; CHUA, Tat-Seng. (2019.0). *Proceedings of the 27th ACM International Conference on Multimedia, Nice, France, 2019 October 21-25*, Nice, France: ACM. <http://doi.org/10.1145/3343031.3350889> (Published)

KGAT: Knowledge graph attention network for recommendation, by WANG, Xiang; HE, Xiangnan; CAO, Yixin; LIU, Meng; CHUA, Tat-Seng. (2019.0). *Proceedings of the 25th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining, Anchorage, 2019 August 4-8*, (pp. 950-958) Anchorage, USA: ACM. <http://doi.org/10.1145/3292500.3330989> (Published)

Multi-channel graph neural network for entity alignment, by CAO, Yixin; LIU, Zhiyuan; LI, Chengjiang; LIU, Zhiyuan; LI, Juanzi; CHUA, Tat-Seng. (2019.0). *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics, Florence, Italy, 2019 July 28 - August 2*, (pp. 1452-1461) Florence, Italy: Association for Computational Linguistics. <http://doi.org/10.18653/v1/P19-1140> (Published)

Personalized fashion recommendation with visual explanations based on multimodal attention network: Towards visually explainable recommendation, by CHEN, Xu; CHEN, Hanxiong; XU, Hongteng; ZHANG, Yongfeng; CAO, Yixin; QIN, Zheng; ZHA, Hongyuan. (2019.0). *Proceedings of the 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval, Paris, France, July 21-25*, (pp. 765-774) Paris, France: ACM. <http://doi.org/10.1145/3331184.3331254> (Published)

Unifying knowledge graph learning and recommendation: towards a better understanding of user preferences, by CAO, Yixin; WANG, Xiang; HE, Xiangnan; HU, Zikun; CHUA, Tat-Seng. (2019.0). *Proceedings of the World Wide Web Conference WWW 2019, San Francisco, May 13-17*, (pp. 151-161) San Francisco, CA, USA: Association for Computing Machinery. <https://doi.org/10.1145/3308558.3313705> (Published)

Explainable reasoning over knowledge graphs for recommendation, by WANG, Xiang; WANG, Dingxian; XU, Canran; HE, Xiangnan; CAO, Yixin; CHUA, Tat-Seng. (2019.0). *Proceedings of the Thirty-Third AAAI Conference on Artificial Intelligence, Honolulu, Hawaii, 2019 January 27 - February 1*, (pp. 5329-5336) Honolulu, Hawaii : ACM. <http://doi.org/10.1609/aaai.v33i01.33015329> (Published)

Joint representation learning of cross-lingual words and entities via attentive distant supervision, by CAO, Yixin; HOU, Lei; LI, Juanzi; LIU, Zhiyuan; LI, Chengjiang; CHEN, Xu; DONG, Tiansi. (2018.0). *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing, Brussels, Belgium, October 31 - November 4*, (pp. 227-237) Brussels, Belgium: Association for Computational Linguistics. <http://doi.org/10.18653/v1/D18-1021> (Published)

Neural collective entity linking, by CAO, Yixin; HOU, Lei; LI, Juanzi; LIU, Zhiyuan. (2018.0). *Proceedings of the 27th International Conference on Computational Linguistics, Santa Fe, New Mexico, 2018 August 20-26*, (pp. 675-686) Santa Fe, New Mexico: Association for Computational Linguistics. <https://aclanthology.org/C18-1057> (Published)

Sequential recommendation with user memory networks, by CHEN, Xu; XU, Hongteng; ZHANG, Yongfeng; TANG, Jiayi; CAO, Yixin; QIN, Zheng; ZHA, Hongyuan. (2018.0). *Proceedings of the Eleventh ACM International Conference on Web Search and Data Mining, Marina Del Rey, CA, 2018 February 5-9*, (pp. 108-116) Marina Del Rey, CA, USA: ACM. <http://doi.org/10.1145/3159652.3159668> (Published)

On modeling sense relatedness in multi-prototype word embedding, by CAO, Yixin; LI, Juanzi; SHI, Jiabin; LIU, Zhiyuan; LI, Chengjiang. (2017.0). *Proceedings of the The 8th International Joint Conference on Natural Language Processing, Taipei, Taiwan, 2017 November 27 - December 1*, (pp. 233-242) Taipei, Taiwan: Association for Computational Linguistics. (Published)

Bridge text and knowledge by learning multi-prototype entity mention embedding, by CAO, Yixin; HUANG, Lifu; JI, Heng; CHEN, Xu; LI, Juanzi. (2017.0). *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics, Vancouver, Canada, 2017 July 30 - August 4*, (pp. 1623-1633) Vancouver, Canada: Association for Computational Linguistics. <http://doi.org/10.18653/v1/P17-1149> (Published)

Name list only? Target entity disambiguation in short texts, by CAO, Yixin; LI, Juanzi; GUO, Xiaofei; BAI, Shuanhu; JI, Heng; TANG, Jie. (2015.0). *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing, Lisbon, Portugal, September 17-21*, (pp. 654-664) Lisbon, Portugal: Association for Computational Linguistics. <http://doi.org/10.18653/v1/D15-1077> (Published)

### Conference Papers

Large language model is not a good few-shot information extractor, but a good reranker for hard samples!, by MA, Yubo; CAO, Yixin; HONG, YongChin; SUN, Aixin. (2023.0). *The 2023 Conference on Empirical Methods in Natural Language Processing, Singapore, December 6-10*, Singapore. (Advance Online)

### **Research Grants**

#### Singapore Management University

Event-centric Document Information Extraction, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Yixin CAO, 2022, S\$100,000

#### Other Institutions

Multi-modal Event Knowledge Graph, NTU-SenseTime funding, NTU-SLab PI (Project Level): Yixin CAO, 2022, SGD280,000

## **TEACHING**

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### **Courses Taught**

#### Singapore Management University

Undergraduate Programmes :

Computational Thinking

Web Application Development I

Postgraduate Professional Programmes :

Natural Language Processing for Smart Assistants

Prompt Engineering for LLMs

Postgraduate Research Programmes :

Empirical Research Project 1

Empirical Research Project 2

**EXTERNAL SERVICE – PROFESSIONAL**

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Invited Lecture, Fudan University, 2023 - Present

Invited Lecture, University of Science and Technology of China, 2023 - Present

Invited Lecture, Renmin University, 2023 - Present

Invited Lecture, WSDM, 2023 - Present

local chair, WSDM, 2023

Session Chair, EMNLP, 2022 - Present

special issue chair, Artificial Intelligence Technology, 2022 - Present

area chair, ACL, 2022 - Present

Invited Lecture, SAIL Lab of SEA company, 2022 - Present

Invited Lecture, Tsinghua University, 2022 - Present

Invited Lecture, Language and Knowledge Computing Professional Committee of the Chinese Information Society of China, 2022 - Present

Senior Area chair, ACL2022, 2022 - Present