## Qingcheng Zeng

# Ph.D. Student at Northwestern University

2016 Sheridan Road, Evanston, IL

☐ qcz@u.northwestern.edu

☐ qcznlp.github.io

Google Scholar

#### Education

2022–2026 Ph.D. in Computational Linguistics

(Expected) Department of Linguistics, Northwestern University, Evanston, IL

o Advisors: Professor Rob Voigt and Professor Kaize Ding

2019–2021 B.A. in Linguistics

University of Manchester, Manchester, UK

2017–2021 B.A. in Linguistics

Zhejiang University, Hangzhou, China

#### Research Interests

- o LLMs for Computational Social Science and Social Good
- Information Retrieval and Search Agent
- Understanding LLMs through Cognitive Science
- o Trustworthy LLMs, Uncertainty Quantification, Verbalized Confidence
- o Multilingual NLP, Machine Translation

#### Research Appointment

Sep 2025 - Research Intern

Dec 2025 Snowflake, Menlo Park, CA

O Working with Puxuan Yu and Aman Mehta in Cortex Search AI team.

June 2025 - Research Scientist Intern

Aug 2025 Tencent AI Lab America, Bellevue, WA

• Working with Linfeng Song, Xiaoyang Wang, Hongming Zhang, and Wenhao Yu, focusing on process reward modeling for agents.

Sep 2024 - Visiting Graduate Student

Nov 2024 Westlake NLP, Westlake University

• Conducted research in multilingual calibration, supervised by Professor Yue Zhang and Dr Leyang Cui.

2024 Visiting Graduate Student

Summer Center for Language and Speech Processing, Johns Hopkins University

Conducted research in AI-curated democratic discourse, supervised by Professor Jason Eisner.

#### 2021–2022 Research Assistant in Natural Language Processing

Zhejiang University, Hangzhou, China

- Conducted research in multilingual NLP and biomedical NLP, supervised by Professor Jie Yang.
- Research Output: effective language model adaptation at *IJCAI 2023*.

#### Main Publications

- \* denotes authors of equal contribution; # denotes corresponding author LLMs for Computational Social Science and Social Good
- Findings of \*Qingcheng Zeng, \*Guanhong Liu, Zhaoqian Xue, Diego Ford, Rob Voigt, AACL 2025 Loni Hagen, Lingyao Li, 2025, Sympathy over Polarization: A Computational Discourse Analysis of Social Media Posts about the July 2024 Trump Assassination Attempt, Accepted at Findings of AACL 2025
  - EMNLP Grace LeFevre, Qingcheng Zeng, Adam Leif, Jason Jewell, Denis Peskoff, Rob 2025 Voigt, 2025, Good Intentions Beyond ACL: Who Does NLP for Social Good, and Where?, Accepted at EMNLP Main 2025
  - Autism Joseph C.Y. Lau, Emily Landau, Qingcheng Zeng, Ruichun Zhang, Stephanie Crawford, Rob Voigt, Molly Losh, 2024, Pre-trained AI language model represents pragmatic language variability central to autism and genetically-related phenotypes, In Autism: International Journal of Research and Practice
  - EMNLP Qingcheng Zeng, Mingyu Jin, Rob Voigt, 2024, Adaptive Axes: A Pipeline for 2024 In-domain Social Stereotype Analysis, In Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing, pages 15576–15593, Miami, Florida, USA. Association for Computational Linguistics.
    - JMIR Rui Yang\*, Qingcheng Zeng\*, Keen You\*, Yujie Qiao\*, Chia-Chun Hsieh, Benjamin Rosand, Jeremy Goldwasser, Amisha Dave, Tiarnan Keenan, Yu He Ke, Chuan Hong, Nan Liu, Emily Chew, Dragomir Radev, Zhiyong Lu, Hua Xu, Qingyu Chen, Irene Li#, 2024, Ascle—A Python Natural Language Processing Toolkit for Medical Text Generation: Development and Evaluation Study, In Journal of Medical Internet Research 2024;26:e60601
    - WNU Mourad Heddaya, **Qingcheng Zeng**, Alexander Zentefis, Rob Voigt, Chenhao Tan, 2024, Causal Micro-Narratives, In *Proceedings of The 6th Workshop on Narrative Understanding*, pages 67–84, Miami, Florida, USA. Association for Computational Linguistics.

#### Trustworthy LLMs and Uncertainty Quantification

- EMNLP **Qingcheng Zeng\***, Weihao Xuan\*, Leyang Cui, Rob Voigt, 2025, Thinking 2025 Out Loud: Do Reasoning Models Know When They're Right?, Accepted at EMNLP Main 2025
- EMNLP Weihao Xuan\*, Qingcheng Zeng\*, Heli Qi, Junjue Wang, Naoto Yokoya, 2025, 2025 Seeing is Believing, but How Much? A Comprehensive Analysis of Verbalized Calibration in Vision-Language Models, Accepted at EMNLP Main 2025
- CIKM 2025 Haoyu Wu\*, **Qingcheng Zeng\***, Kaize Ding, 2025, Fact or Facsimile? Evaluating the Factual Robustness of Modern Retrievers, Accepted at CIKM 2025

CIKM 2025 **Qingcheng Zeng**, Mingyu Jin, Qinkai Yu, Zhenting Wang, Wenyue Hua, Guangyan Sun, Yanda Meng, Shiqing Ma, Qifan Wang, Felix Juefei-Xu, Fan Yang, Kaize Ding, Ruixiang Tang, Yongfeng Zhang, 2025, Uncertainty Quantification for Multiple-Choice Questions is Just One-Token Deep, Accepted at CIKM 2025

Understanding LLMs through Cognitive Science

- ACL 2025 Suet-Ying Lam\*, Qingcheng Zeng\*#, Jingyi Wu, Rob Voigt, 2025, Leveraging Human Production-Interpretation Asymmetries to Test LLM Cognitive Plausibility, In Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers), pages 158–171, Vienna, Austria. Association for Computational Linguistics.
- COLING Mingyu Jin\*, Qinkai Yu\*, Jingyuan Huang\*, Qingcheng Zeng\*, Zhenting 2025 Wang, Wenyue Hua, Haiyan Zhao, Kai Mei, Yanda Meng, Kaize Ding, Fan Yang, Mengnan Du, Yongfeng Zhang#, 2025, Exploring Concept Depth: How Large Language Models Acquire Knowledge and Concept at Different Layers?, In Proceedings of the 31st International Conference on Computational Linguistics, pages 558–573, Abu Dhabi, UAE. Association for Computational Linguistics.
- Findings of Suet-Ying Lam\*, Qingcheng Zeng\*#, Kexun Zhang\*, Chenyu You, Rob Voigt, ACL 2023 2023, Large Language Models Are Partially Primed in Pronoun Interpretation, In Findings of the Association for Computational Linguistics: ACL 2023, pages 9493–9506, Toronto, Canada. Association for Computational Linguistics.
  - COLING Qingcheng Zeng and An-Ran Li, 2022, A Survey in Automatic Irony Processing:

    2022 Linguistic, Cognitive, and Multi-X Perspectives, In Proceedings of the 29th
    International Conference on Computational Linguistics, pages 824-836, Gyeongju,
    Republic of Korea. International Committee on Computational Linguistics.

    Multilingual NLP and Machine Translation
    - EMNLP Weihao Xuan, Rui Yang, Heli Qi, **Qingcheng Zeng**, ..., Irene Li, 2025, MMLU-2025 ProX: A Multilingual Benchmark for Advanced Large Language Model Evaluation, Accepted at EMNLP Main 2025
- IJCAI 2023 Qingcheng Zeng\*, Lucas Garay\*, Peilin Zhou\*, Dading Chong, Yining Hua, Jiageng Wu, Yikang Pan, Han Zhou, Rob Voigt, Jie Yang#, 2023, GreenPLM: Cross-Lingual Transfer of Monolingual Pre-Trained Language Models at Almost No Cost, In Proceedings of the Thirty-Second International Joint Conference on Artificial Intelligence, pages 6290–6298, Macau, China. International Joint Conferences on Artificial Intelligence.
  - XLLM Daoyang Li, Haiyan Zhao, Qingcheng Zeng, Mengnan Du, 2025, Exploring Multilingual Probing in Large Language Models: A Cross-Language Analysis, In Proceedings of the 1st Joint Workshop on Large Language Models and Structure Modeling (XLLM 2025), pages 61–70, Vienna, Austria. Association for Computational Linguistics.

Other Publications

- NeurIPS Sijia Chen, Xiaomin Li, Mengxue Zhang, Eric Hanchen Jiang, **Qingcheng** 2025 **Zeng**, Chen-Hsiang Yu, 2025, CARES: Comprehensive Evaluation of Safety and Adversarial Robustness in Medical LLMs, Accepted at NeurIPS 2025 D&B Track
- NeurIPS Shulin Huang, Linyi Yang, Yan Song, Shuang Chen, Leyang Cui, Ziyu Wan, 2025 Qingcheng Zeng, Ying Wen, Kun Shao, Weinan Zhang, Jun Wang, Yue Zhang, 2025, ThinkBench: Dynamic Out-of-Distribution Evaluation for Robust LLM Reasoning, Accepted at NeurIPS 2025 D&B Track
- BioNLP Rui Yang, Haoran Liu, Edison Marrese-Taylor, **Qingcheng Zeng**, Yu He Ke, Wanxin Li, Lechao Cheng, Qingyu Chen, James Caverlee, Yutaka Matsuo, Irene Li, 2024, KG-Rank: Enhancing Large Language Models for Medical QA with Knowledge Graphs and Ranking Techniques, In *Proceedings of the 23rd Workshop on Biomedical Natural Language Processing*, pages 155–166, Bangkok, Thailand. Association for Computational Linguistics.
- Findings of Fan Gao, Hang Jiang, Rui Yang, **Qingcheng Zeng**, Jinghui Lu, Moritz Blum, ACL 2024 Dairui Liu, Tianwei She, Yuang Jiang, Irene Li, 2024, Evaluating Large Language Models on Wikipedia-Style Survey Generation, In Findings of the Association for Computational Linguistics: ACL 2024, pages 5405–5418, Bangkok, Thailand. Association for Computational Linguistics.
- NEJM AI Jiageng Wu, Xiaocong Liu, Minghui Li, Wanxin Li, Zichang Su, Shixu Lin, Lucas Garay, Zhiyun Zhang, Yujie Zhang, Qingcheng Zeng, Jie Shen, Changzheng Yuan, Jie Yang#, 2024, Clinical Text Datasets for Medical Artificial Intelligence and Large Language Models A Systematic Review, In New England Journal of Medicine AI, 1(6)
  - ICASSP Dading Chong, Helin Wang, Peilin Zhou, Qingcheng Zeng, 2023, Masked
     Spectrogram Prediction for Self-Supervised Audio Pre-Training, In ICASSP
     2023 2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pages 1-5, Rhodes Island, Greece. IEEE.
  - IS 2022 Qingcheng Zeng, Dading Chong, Peilin Zhou, Jie Yang#, 2022, Low-resource Accent Classification in Geographically-proximate Settings: A Forensic and Sociophonetics Perspective, In *Proceedings of Interspeech 2022*, pages 5308-5312, Incheon, Korea. International Speech Communication Association.
  - IS 2022 Peilin Zhou, Dading Chong, Helin Wang, **Qingcheng Zeng**, 2022, Calibrate and Refine! A Novel and Agile Framework for ASR Error Robust Intent Detection, In Proceedings of Interspeech 2022, pages 1096-1100, Incheon, Korea. International Speech Communication Association.

#### Honors & Awards

- Q-Step Center Best Dissertation Award (£100) University of Manchester
- The Dean Award for Achievement

University of Manchester

O Graduate Fellowship

- Northwestern University
- o TGS Conference Travel Grant (IJCAI 2023, \$850) Northwestern University
- o TGS Conference Travel Grant (EMNLP 2024, \$800) Northwestern University

- O Departmental Travel Grant (EMNLP 2024, \$400) Northwestern University
- O Excellent Reviewer

KDD 2025 Applied Data Science Track

#### Teaching Experiences

2023 Fall Teaching Assistant, COGSCI 110, Introduction to Cognitive Science, North-

western University

2025 Winter Teaching Assistant, LING331, Text Processing for Linguists, Northwestern

University

2025 Spring **Teaching Assistant**, LING220, Language & Society, Northwestern University

#### Service

Conferences ICTAI 2022, AACL 2022, ICASSP 2024/2025, ACL Rolling Re-Reviewer view, IC2S2 2024, WWW 2025/2026, KDD 2025/2026, IJCAI 2025, NeurIPS 2025

Journal Computer Speech and Language, Knowledge-Based Systems, Expert Reviewer Systems With Applications, IEEE Access, International Journal of Medical Informatics, Information Processing and Management, Neurocomputing, Neural Networks, Telematics and Informatics Reports, Pattern Recognition, Acta Psychologica

Service

Departmental Colloquium Committee Member 2023-2024

#### References

o Rob Voigt (PhD Advisor)

Department of Linguistics Assistant Professor of Linguistics **UC** Davis Davis, CA robvoigt@ucdavis.edu

O Kaize Ding (PhD Co-advisor)

Department of Statistics and Data Science Assistant Professor of Statistics and Data Science Northwestern University Evanston, IL kaize.ding@northwestern.edu

o Lingyao Li (PhD Committee)

School of Information Assistant Professor of Information University of South Florida Tampa, FL lingyaol@usf.edu

### $\bigcirc \ \mathbf{Matt} \ \mathbf{Goldrick} \ (\mathrm{PhD} \ \mathrm{Committee})$

Department of Linguistics Professor of Linguistics and Psychology (by courtesy) Northwestern University Evanston, IL matt-goldrick@northwestern.edu