Ruixiang Cui

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EXPERTISE

Large language models (training, instruction tuning, prompt engineering, massive data generation, curation and evaluation), deep learning-based NLP frameworks (PyTorch, TensorFlow), cloud computing (Azure, GCP, AWS), SQL databases, semantic parsing

EDUCATION

University of Copenhagen *2021-2024*
PhD in Computer Science, Natural Language Processing
Advisors: Daniel Hershcovich, Anders Søgaard
Thesis title: Evaluating Language Models - From Multilingual Compositional Semantic Parsing to Human-level Complex Reasoning

Stanford University *2023*
Visiting Researcher, Stanford NLP Group
Topic: Mechanistic interpretability of LLMs

University of Oxford *2022*
Machine Learning Summer School
Topic: Multimodal machine learning applications

University of Copenhagen *2018-2020*
MSc in IT and Cognition
Key courses: Computational Cognitive Science, Vision and Image Processing, NLP

Jilin University; Complutense University of Madrid *2014-2018*
BA in Hispanic Philology, minor in Computational Linguistics

EXPERIENCE

Microsoft Research *01/2023-06/2023*
Research Intern

· Spearheaded *AGIEval*, a canonical benchmark for assessing complex reasoning capabilities of LLMs, adopted by more than 20 major LLM companies. Designed and executed data management pipelines, encompassing data collection, refinement, and analysis.
· Co-devised a human workflow platform with LLM for generating consistent long-form content such as talks and presentations in professional situations, offering a customizable and scalable solution.

University of Copenhagen *09/2021-12/2022*
Teaching Assistant

· Taught and mentored 80 students across three courses: Natural Language Processing (MSc), Machine Learning (BSc) and Database Design (BSc).

Industrial and Commercial Bank of China *06/2016-09/2016*
Data Analyst Intern

· Crafted and deployed an information extraction system for letters of credit transactions. This system significantly streamlined data processing and increased efficiency by 100% in financial operations.

SKILLS

Programming Languages	Python, Java, SQL, SPARQL, LaTeX, Visual Basic, Perl
Frameworks and Tools	PyTorch, TensorFlow, Keras, SciPy, Scikit-learn, NumPy, Pandas, Matplotlib, NLTK, OpenCV, Git, grep, Excel, Tableau
Languages	Mandarin Chinese (Native), English (Full professional), Spanish (Professional), Danish (Limited working), Portuguese (Limited working), Italian (Elementary)

HONORS & AWARDS

Excellent Internship Award	Microsoft Research *2023*
Excellent Student Leader & Second Prize Scholarship	Jilin Univerisity *2016*
First Prize Scholarship	Jilin Univerisity *2015*

SELECTED PUBLICATIONS (CITATIONS: 355; H-INDEX: 7)

[1] Wanjun Zhong*, **Ruixiang Cui***, Yiduo Guo, Yaobo Liang, Shuai Lu, Yanlin Wang, Amin Saied, Weizhu Chen, Nan Duan. 2024. *AGIEval: A Human-Centric Benchmark for Evaluating Foundation Models*. Findings of North American Chapter of the Association for Computational Linguistics (NAACL).

[2] Yong Cao, Yova Kementchedjhieva, **Ruixiang Cui**, Antonia Karamolegkou, Li Zhou, Megan Dare, Lucia Donatelli, Daniel Hershcovich. 2024. *Cultural Adaptation of Recipes*. Transactions of the Association for Computational Linguistics (TACL).

[3] **Ruixiang Cui**, Seolhwa Lee, Daniel Hershcovich, Anders Søgaard. 2023. *What does the Failure to Reason with "Respectively" in Zero/Few-Shot Settings Tell Us about Language Models?*. Annual Meeting of the Association for Computational Linguistics (ACL).

[4] Nikolaus Schrack, **Ruixiang Cui**, Hugo A. López, Daniel Hershcovich. 2022. *Can AMR Assist Legal and Logical Reasoning?*. Findings of Conference on Empirical Methods in Natural Language Processing (EMNLP).

[5] **Ruixiang Cui**, Rahul Aralikatte, Heather Lent, Daniel Hershcovich. 2022. *Compositional Generalization in Multilingual Semantic Parsing over Wikidata*. Transactions of the Association for Computational Linguistics (TACL, oral presentation at EMNLP).

[6] **Ruixiang Cui**, Daniel Hershcovich, Anders Søgaard. 2022. *Generalized Quantifiers as a Source of Error in Multilingual NLU Benchmarks*. North American Chapter of the Association for Computational Linguistics (NAACL, oral).

[7] Stephanie Brandl, **Ruixiang Cui**, Anders Søgaard. 2022. *How Conservative are Language Models? Adapting to the Introduction of Gender-Neutral Pronouns*. North American Chapter of the Association for Computational Linguistics (NAACL).

[8] Daniel Hershcovich, Stella Frank, Heather Lent, Miryam de Lhoneux, Mostafa Abdou, Stephanie Brandl, Emanuele Bugliarello, Laura Cabello Piqueras, Ilias Chalkidis, **Ruixiang Cui**, Constanza Fierro, Katerina Margatina, Phillip Rust, Anders Søgaard. 2022. *Challenges and Strategies in Cross-Cultural NLP*. Annual Meeting of the Association for Computational Linguistics (ACL).

SERVICE

Reviewer: NeurIPS, ACL, EMNLP, NAACL, CoNNL, *SEM, AmericasNLP

HOBBIES

Travelling, Literature, Musicology, Philosophy, Cooking, Biking, Running