

Ruixiang Cui

E-mail: cuirx@outlook.com ◊ Homepage: ruixiangcui.github.io

Google Scholar: 3M-1U2wAAAAJ ◊ GitHub: ruixiangcui ◊ LinkedIn: ruixiang-cui

EXPERTISE

Large language models (training, instruction tuning, prompt engineering, large-scale data generation, processing 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
Frameworks and Tools
Languages

Python, Java, SQL, SPARQL, LaTeX, Visual Basic, Perl
PyTorch, TensorFlow, Keras, SciPy, Scikit-learn, NumPy, Pandas,
Matplotlib, NLTK, OpenCV, Git, grep, Excel, Tableau
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 Aralikkatte, 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, CoNLL, *SEM, AmericasNLP

HOBBIES

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