## Boyuan (Steven) Zheng

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 ☐ Google Scholar LinkedIn

#### EDUCATION \_

#### The Ohio State University, Columbus

2023 - present

Ph.D. Candidate in Computer Science

Advisors: Prof. Yu Su

#### Johns Hopkins University, Baltimore

2021 - 2023

Master student in Computer Science Advisors: Prof. Benjamin Van Durme

#### Northeastern University, Shenyang

2017 - 2021

B. Tech (Honours) in Software Engineering

GPA: 92.5/100, Rank: 2/543

Advisor: Prof. Yue Zhang (Westlake University) & Prof. Xiaodan Zhu (Queen's University)

#### Professional Experiences

The Ohio State University, Research Assistant

Sep 2023 - Present

- Evaluated and explored solutions for image referring using image annotation
- Developed multimodal web agent by grounding vision-language models
- Developed automatic testing tool to enable online evaluation in real webiste for Web Agent(NeurIPS'23)

Amazon Alexa AI, Applied Scientist Intern

June 2023 - Sep 2023

- Trained high-performance query rewriting models based on FLAN-T5 with million-level datasets.
- Augmented model performance and personalized user experience with retrieval from user history queries.
- Optimized model efficiency by retrieval deduplication based on self-information and pairwise mutual information.

#### Johns Hopkins University, Research Assistant

Jan 2022 - May 2023

Supervisor: Prof. Benjamin Van Durme

- Built a large-scale coreference resolution benchmark in multiparty dialogue with rich third-person reference (TACL'23)
- Developed mention linking annotation interface for dialogue coreference resolution task
- Developed dataset projection method to extend English dataset to 62 languages with low cost
- Conducted an empirical study on 3 typical span finding methods across 5 Information Extraction tasks (EMNLP'22)

#### Publications \_\_\_\_\_

- 7. Mind2Web: Towards a Generalist Agent for the Web (NeurIPS'23 Spotlight)
  Xiang Deng, Yu Gu, Boyuan Zheng, Shijie Chen, Samuel Stevens, Boshi Wang, Huan Sun, Yu Su
- 6. Flatness-Aware Prompt Selection Improves Accuracy and Sample Efficiency (EMNLP'23) Lingfeng Shen, Weiting Tan, Boyuan Zheng, Daniel Khashabi
- 5. Multilingual Coreference Resolution in Multiparty Dialogue (TACL'23) Boyuan Zheng, Patrick Xia, Mahsa Yarmohammadi, Benjamin Van Durme
- 4. An Empirical Study on Finding Spans (EMNLP'22) Weiwei Gu\*, Boyuan Zheng\*, Yunmo Chen, Tongfei Chen, Benjamin Van Durme
- 3. Learn to Remember: Transformer with Recurrent Memory for Document-level Machine Translation (NAACL'22) Yukun Feng, Feng Li, Ziang Song, Boyuan Zheng, Philipp Koehn,
- 2. SemEval-2021 Task 4: Reading Comprehension of Abstract Meaning (SemEval'21) Boyuan Zheng, Zhenhua Ling, Quan Liu, Yuping Ruan, Si Wei, Xiaodan Zhu
- 1. Exploring Generalization Ability of Pretrained Language Models on Arithmetic and Logical Reasoning (NLPCC'21) Cunxiang Wang\*, Boyuan Zheng\*, Yuchen Niu and Yue Zhang

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Deepspeed, Redis, Transformers, Faiss, Python, PyTorch, Tensorflow, Spark, Java, SQL, JavaScript

# ACADEMIC SERVICE \_\_\_

**Reviewer:** EMNLP-2023, ACL-2023, AACL-2023, ACL Rolling Review, SemEval-2022, SemEval-2024 **Volunteer:** NAACL-2022, ICML-2022, EMNLP-2022

### SELECTED AWARDS AND HONORS \_\_\_\_\_

• National Scholarship	2018
• The First Prize Scholarship of Northeastern University	2018
• Pacemaker to Merit Student	2018
• Interdisciplinary Contest In Modeling - Meritorious Winner	2019