

Zijie Wang

zijiewang@arizona.edu | wang-zijie.github.io/

EDUCATION

University of Arizona <i>Doctor of Philosophy, Computer Science</i> <ul style="list-style-type: none">Advisor: Dr. Eduardo Blanco	Tucson, AZ, USA Aug. 2022 – Present
Arizona State University (Transferred with advisor) <i>Doctor of Philosophy, Computer Science</i> <ul style="list-style-type: none">Advisor: Dr. Eduardo Blanco	Tempe, AZ, USA Jan. 2022 – Aug. 2022
Arizona State University <i>Master of Science, Computer Science</i> <ul style="list-style-type: none">Thesis: Examining Data Integration with Schema Changes Based on Cell-level Mapping Using Deep Learning Models	Tempe, AZ, USA Aug. 2019 – Dec. 2021
Beijing Information Science & Technology University <i>Bachelor of Engineering, Computer Science and Technology</i>	Beijing, China Sept. 2015 – June 2019

RESEARCH INTERESTS

Natural language understanding, natural language generation, question answering, dialogue system, multilingual understanding, foundation models, artificial intelligence, and machine learning.

PUBLICATIONS

- Zijie Wang**, Farzana Rashid, and Eduardo Blanco. Interpreting answers to yes-no questions in dialogues from multiple domains. *To be appear in NAACL 2024 Findings*
- Zijie Wang**, Md Hossain, Shivam Mathur, Terry Melo, Kadir Ozler, Keun Park, Jacob Quintero, MohammadHossein Rezaei, Shreya Shakya, Md Uddin, and Eduardo Blanco. Interpreting indirect answers to yes-no questions in multiple languages. In Houda Bouamor, Juan Pino, and Kalika Bali, editors, *Findings of the Association for Computational Linguistics: EMNLP 2023*, pages 2210–2227, Singapore, December 2023. Association for Computational Linguistics
- Lixi Zhou, Arindam Jain, **Zijie Wang**, Amitabh Das, Yingzhen Yang, and Jia Zou. Benchmark of dnn model search at deployment time. In *Proceedings of the 34th International Conference on Scientific and Statistical Database Management, SSDBM '22*, New York, NY, USA, 2022. Association for Computing Machinery
- Zijie Wang**, Lixi Zhou, and Jia Zou. Integration of fast-evolving data sources using a deep learning approach. In *Software Foundations for Data Interoperability and Large Scale Graph Data Analytics*, pages 172–186. Springer, 2020

EXPERIENCE

Research Assistant

Aug. 2022 – Present

University of Arizona, Supervisor: Dr. Eduardo Blanco

Tucson, AZ, USA

- Detecting and Answering **Questions with False Assumptions**.
We propose a method based on statement decomposition to detect questions with false assumptions. Our method has better interpretability by reasoning out where the false assumptions are.
Expected one paper submission to a top conference
- Interpreting Indirect Answers to **Yes-No Questions**.
We develop yes-no question datasets in multi-domains (three domains) and multi-languages (nine languages). We investigate a distant supervised method to interpret the indirect answers to yes-no questions.
Two first-author papers accepted to NAACL 2024 Findings [1] and EMNLP 2023 Findings [2]
[Github Repo](#)

Research Assistant

May 2020 - Dec. 2021

Arizona State University, Supervisor: Dr. Jia Zou

Tempe, AZ, USA

- **Integration of Unmanaged Data** Using Deep Learning.
We propose an automatic data integration pipeline that integrates (semi-)structured data from heterogeneous sources. We train language models (Bi-LSTM and BERT) on datasets without schema changes and test with the updated dataset with schema changes.
First-author paper published [4]
[Github Repo](#)
- **Searching DNN Model** for Deployment.
We develop a model search tool that facilitates model reuse when deploying with new datasets. We propose an asymmetric similarity-based metric to select the best-performing candidate model without retraining.
One paper published [3]

AWARDS

UofA GPSC Travel Fund Award

Dec. 2023

Department of Cognitive Science Travel Award

Nov. 2023

Outstanding undergraduate student, Beijing City (5 in 300)

June 2019

Best Graduation Project (20 in 300)

May 2019

Academic Excellent Scholarship (20 in 300)

Nov. 2016, 2017, 2018

SKILLS

Programming Language: Python, Java, Perl, C++, Scala, SQL

Machine Learning & NLP Tools: PyTorch, TensorFlow, Keras; NLTK, spaCy.

Deep Learning Models: (Bi-)LSTM, (m)BERT, (XLM-)RoBERTa, BART, T5, GPT-X, Alpaca, LLaMa, etc.

SERVICES

Conference review: ACL 2023, EMNLP 2023, AACL 2023, ACL Rolling Review

Journal review: ACM TALLIP (May 2022)