Zhenduo Wang

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RESEARCH **EXPERTISE**

I am a postdoctoral researcher who works on large language model alignment at Georgia Institute of Technology with Prof. Alan Ritter. I have previously worked on many Natural Language Processing and Information Retrieval tasks, particularly conversational AI systems and natural language generation. I am also experienced with Reinforcement Learning and Imitation Learning, as they played an important part in my past research.

EDUCATION

University of Utah

Aug. 2018 - Jan. 2024

Ph.D. in Computer Science

Advised by: Qingyao Ai and Vivek Srikumar

Thesis: Modeling Mixed-initiative Conversational Search

University of Minnesota Duluth

Sept. 2016 - May 2018

M.S. in Mathematics

Advised by: Yang Li and Ted Pedersen

Dalian University of Technology

Sept. 2012 - Jun. 2016

B.E. in Department of Software Engineering

WORK **EXPERIENCE**

Postdoc at Georgia Tech

March. 2024 - March. 2025

- Led dataset creation for physical safety in instructional chat assistant.
- Aligned large language models (e.g., Llama-3.1, Qwen-2.5) with physical safety awareness for conversational chat assistant.

Research Intern at Microsoft

May. 2022 - Aug. 2022

• Conducted research about Zero-shot Clarifying question generation for conversational search and published in The Web Conference 2023 (WWW'23).

Machine Learning Intern at Roku Inc.

May. 2021 - Aug. 2021

 Conducted online and offline unbiased learning-to-rank research for Roku's Search system and demonstrated its effectiveness.

Data Scientist Intern at American Family Insurance

May. 2019 - Aug. 2019

• Developed, tested, and refined a BERT based Multi-Task Learning model for home issue classification.

SELECTED

Zhenduo Wang, Zhichao Xu, Vivek Srikumar, and Qingyao Ai. An In-depth In-PUBLICATIONS vestigation of User Response Simulation for Conversational Search. In The Web Conference 2024 (**WWW'24**).

Zhenduo Wang, Yuancheng Tu, Corby Rosset, Nick Craswell, Ming Wu, and Qingyao Ai. Zero-shot Clarifying Question Generation for Conversational Search. In The Web Conference 2023 (**WWW'23**).

Zhenduo Wang and Qingyao Ai. Simulating and Modeling the Risk of Conversational Search. In ACM Transactions on Information Systems (**TOIS**)

Zhenduo Wang and Qingyao Ai. Controlling the Risk of Conversational Search via Reinforcement Learning. In The Web Conference 2021 (**WWW'21**).

TALKS

Conference Presentations

- "An In-depth Investigation of User Response Simulation for Conversational Search." **Distinguished Speaker** in The Web Conference 2024 (WWW).
- "Zero-shot Clarifying Question Generation for Conversational Search." In The Web Conference 2023 (WWW).
- "Controlling the Risk of Conversational Search via Reinforcement Learning." The Web Conference 2021 (WWW).

Invited Talks

- "Modeling Mixed-initiative Conversational Search" at Objective Inc.
- "Controlling the Risk of Conversational Search via Reinforcement Learning." SCAI: Search-Oriented Conversational AI Workshop at SIGIR Conference 2022.

ACADEMIC SERVICE

PC Members

- CIKM 2025
- SIGIR 2025
- CIKM 2024
- LREC-COLING 2024
- WWW 2024
- Distinguished Reviewer in CIKM 2023
- TOIS-2023-0153
- CCL 2021
- SemEval 2018

DEVELOPING EXPERIENCE

Magic Circle: A Card Video Game

Jan. 2014 - Apr. 2015

- Designed and developed an original card game with the Unity3D engine.
- Won the third prize in the Microsoft Imagine Cup Game Competition 2015.
- Feel free to check the Video and Source.

HONOR AND AWARDS

Distinguished Speaker in WWW 2024	2024
Distinguished Reviewer in CIKM 2023	2023
Outstanding Graduate Student at University of Minnesota Duluth	2018
Outstanding Graduate Teaching Assistant at University of Minnesota Duluth	2018
1^{st} prize in Mathematical Contest In Modeling	2016
3^{rd} prize in Microsoft Imagine Cup Games Competition	2015
Outstanding Academic Work Scholarship at Dalian University of Technology	2014
Provincial 1^{st} and national 3^{rd} prize of Chinese Mathematical Competition	2013