Zhenduo Wang

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EDUCATION University of Utah

Aug. 2018 - Jan. 2024

Ph.D. candidate 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

RESEARCH **EXPERTISE**

I am a postdoctoral researcher 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.

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)).

> Zhenduo Wang and Ted Pedersen. UMDSub at SemEval-2018 Task 2: Multilingual Emoji Prediction Multi-channel Convolutional Neural Network on Subword Embedding. In **SemEval**@NAACL-HLT 2018

> Kevin Swanberg and Madiha Mirza and Ted Pedersen and Zhenduo Wang. ALA-NIS at SemEval-2018 Task 3: A Feature Engineering Approach to Irony Detection in English Tweets. In **SemEval**@NAACL-HLT 2018

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

• "Controlling the Risk of Conversational Search via Reinforcement Learning." SCAI: Search-Oriented Conversational AI Workshop at SIGIR Conference 2022.

ACADEMIC SERVICE

PC Members

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

WORK EXPERIENCE

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.

DEVELOPING EXPERIENCE

Magic Circle: A Card Video Game

Jan. 2014 - Apr. 2015

- Fully designed and developed a card game with the Unity3D engine.
- \bullet Won the third prize in the Microsoft Imagine Cup Game Competition 2015.

 ${\rm Video:\ https://v.youku.com/v_show/id_XOTIyNzAxNjAw.html}$

Project: https://github.com/zhenduow/TMC

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 Dulut	th 2018
1^{st} prize in Mathematical Contest In Modeling	2010
3^{rd} prize in Microsoft Imagine Cup Games Competition	201
Outstanding Academic Work Scholarship at Dalian University of Technolog	y 2014
Provincial 1^{st} and national 3^{rd} prize of Chinese Mathematical Competition	2013