

Zhichao Xu

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[Research Interests](#) Language Model, Explainable Information Retrieval, Dialogue System

[Education](#) **University of Utah** Salt Lake City, UT
PhD in Computer Science 09/2020 – Present
Advisor: [Dr. Vivek Srikumar](#) and [Dr. Bei Wang](#)

Rutgers University New Brunswick, NJ
MS in Computer Science 09/2018 – 05/2020
Advisor: [Dr. Yongfeng Zhang](#)
CS Department Outstanding Publication Award

Shanghai University of Finance & Economics Shanghai, CN
BS in Applied Statistics 09/2014 – 06/2018

[Selected Publications](#) A Lightweight Constrained Generation Alternative for Query-focused Summarization [[pdf](#)], [[code](#)]

Zhichao Xu and Daniel Cohen.
in proceedings of the 46th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2023

FARA: Future-aware Ranking Algorithm for Fairness Optimization [[pdf](#)]
Tao Yang, **Zhichao Xu**, Zhenduo Wang and Qingyao Ai
in proceedings of the 32th ACM International Conference on Information and Knowledge Management (CIKM) 2023.

Vertical Allocation-based Fair Exposure Amortizing in Ranking [[pdf](#)]
Tao Yang, **Zhichao Xu**, Qingyao Ai.
in proceedings of the 1st International ACM SIGIR Conference on Information Retrieval in the Asia Pacific (SIGIR AP), 2023

A Reusable Model-agnostic Framework for Faithfully Explainable Recommendation and System Scrutability [[pdf](#)]
Zhichao Xu, Hansi Zeng, Juntao Tan, Zuohui Fu, Yongfeng Zhang and Qingyao Ai
in ACM Transactions on Information Systems (TOIS), 2023

Automated Generation of Security-Centric Descriptions for Smart Contract Bytecode [[pdf](#)], **Distinguished Paper Award**
Yu Pan, **Zhichao Xu**, Levi Taiji Li, Yunhe Yang and Mu Zhang
in proceedings of the 32nd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA), 2023

MCFair, Marginal-Certainty-aware Fair Ranking Algorithm [\[pdf\]](#), [\[code\]](#)
Tao Yang, **Zhichao Xu**, Zhenduo Wang, Anh Tran, Qingyao Ai.
in proceedings of 16th ACM International Conference on Web Search and Data Mining (WSDM), 2023

Understanding the Effectiveness of Reviews in E-commerce Top-N Recommendation [\[pdf\]](#), [\[code\]](#)
Zhichao Xu, Hansi Zeng, Qingyao Ai.
in proceedings of 7th International Conference on the Theory of Information Retrieval (ICTIR), 2021

A Zero Attentive Relevance Matching Network for Review Modeling in Recommendation System [\[pdf\]](#), [\[code\]](#)
Hansi Zeng, **Zhichao Xu**, Qingyao Ai.
43rd European Conference on Information Retrieval (ECIR), 2021

E-commerce Recommendation with Weighted Expected Utility [\[pdf\]](#)
Zhichao Xu, Yi Han, Yongfeng Zhang, Qingyao Ai.
29th ACM International Conference on Information and Knowledge Management (CIKM) 2020

Speech-Based Activity Recognition for Trauma Resuscitation [\[pdf\]](#)
Jalal Abdulbaqi, Yue Gu, **Zhichao Xu**, Chenyang Gao, Ivan Marsic, Randall S Burd.
8th IEEE International Conference on Healthcare Informatics (ICHI), 2020

Preprints

Counterfactual Editing for Search Result Explanation [\[pdf\]](#)
Zhichao Xu, Hemank Lamba, Qingyao Ai, Joel Tetreault and Alex Jaimes

An In-depth Investigation of User Simulation for Conversational Search [\[pdf\]](#)
Zhenduo Wang, **Zhichao Xu**, Qingyao Ai and Vivek Srikumar

Reward-free Policy Imitation Learning for Conversational Search [\[pdf\]](#)
Zhenduo Wang, **Zhichao Xu**, Qingyao Ai

Technical Reports

Reinforcement Learning to Rank with Coarse-grained Labels [\[pdf\]](#)
(* indicates equal contribution)
Zhichao Xu*, Anh Tran*, Tao Yang, Qingyao Ai.
manuscript on arXiv, 2022

Learning to Rank Rationales for Explainable Recommendation [\[pdf\]](#), [\[code\]](#)
Zhichao Xu, Yi Han, Tao Yang, Anh Tran, Qingyao Ai.
manuscript on arXiv, 2022

Working Papers	Multi-dimensional Evaluation of Empathetic Dialogue Utterances Zhichao Xu , Jiepu Jiang <i>in submission</i>	
	In-Context Example Ordering Guided by Label Distributions Zhichao Xu , Daniel Cohen, Bei Wang Philips, Vivek Srikumar <i>in submission</i>	
Industry Experience	Google Research	Mountain View, CA
	Student Researcher	05/2023 – 08/2023
	hosted by Dr. Jiepu Jiang	
	Dataminr	NYC, NY
	Research Scientist Intern	09/2022 – 12/2022
	mentored by Dr. Daniel Cohen , Dr. Hemank Lamba	
	Dataminr	NYC, NY
	Research Scientist Intern	05/2022 – 08/2022
	mentored by Dr. Sebastian Bruch , Dr. Hemank Lamba	
	SAP Lab	Shanghai, CN
	Data Scientist Intern (part-time)	12/2017 – 06/2018
Teaching	Lead TA, CS 5140/6140 Data Mining, School of Computing, University of Utah	
	Lecturer: Prof. Ana Marasovic	Spring 2023
	TA, CS 2100 Discrete Structures, School of Computing, University of Utah	
	Lecturer: Prof. Bei Wang Philips	Fall 2022
	TA, CS 5140/6140 Data Mining, School of Computing, University of Utah	
	Lecturer: Prof. Qingyao Ai	Spring 2022
Service	Conference Reviewer: CCL, ACL, SIGIR	
	Conference Subreviewer: KDD, TheWebConf, RecSys	
	Journal Reviewer: TOIS	
	Workshop Reviewer: DLP-KDD, DLP-RecSys	
Skills	Programming: Python, PHP, Java, C++, Matlab	
	Tools: PyTorch, Tensorflow, Spark, MapReduce, MongoDB, MySQL, \LaTeX	