Zhichao Xu

Email: zhichao.xu@utah.edu Homepage Google Scholar Github

Research Interests Search and Recommendation, Explainability IR, Conversation

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

Shanghai University of Finance & Economics Shanghai, CN

BS in Applied Statistics, BE in Computer Science 09/2014 – 06/2018

Advisor: Dr. Sirong Luo

Industry Experience Dataminr NYC, US

Research Scientist Intern 09/2022 – 12/2022

mentored by Dr. Daniel Cohen, Dr. Hemank Lamba

Research Project on Cross-lingual Retrieval

Dataminr NYC, US

Research Scientist Intern 05/2022 – 08/2022

mentored by Dr. Sebastian Bruch, Dr. Hemank Lamba

Research Project on Counterfactual Explanations for Web Search/Ad Hoc Re-

trieval (in submission)

SAP Lab Shanghai, CN

Data Scientist Intern (part-time) 12/2017 – 06/2018

Developed a business intelligence automation tool to assist sales agents with

generating report and data visualization

Wrote interface functions from S4 Hana to acquire data to assist sales agents

(Java, Python, MySQL, MongoDB)

Ipsos Market Research Shanghai, CN

Frontend Development Engineer Intern (fulltime) 05/2017 – 09/2017 Colloborate with analysis team to build webpages for visualization and market

research report (HTML, CSS, PhP, Web Crawler)

Selected Publications Understanding the Effectiveness of Reviews in E-commerce Top-N rec-

ommendation

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

Hansi Zeng, Zhichao Xu, Qingyao Ai.

43rd European Conference on Information Retrieval (ECIR), 2021.

Speech-Based Activity Recognition for Trauma Resuscitation

Jalal Abdulbaqi, Yue Gu, **Zhichao Xu**, Chenyang Gao, Ivan Marsic, Randall S Burd.

8th IEEE International Conference on Healthcare Informatics (ICHI), 2020

$\hbox{E-commerce Recommendation with Weighted Expected Utility Theory}\\$

Zhichao Xu, Yi Han, Yongfeng Zhang, Qingyao Ai.

29th ACM International Conference on Information and Knowledge Management (CIKM), 2020.

Preprints

Reinforcement Learning to Rank with Coarse-grained Labels

(* indicates equal contribution)

Zhichao Xu*, Anh Tran*, Tao Yang, Qingyao Ai.

manuscript on arXiv, 2022

Learning to Rank Rationales for Explainable Recommendation

Zhichao Xu, Yi Han, Tao Yang, Anh Tran, Qingyao Ai.

manuscript on arXiv, 2022

Effective Exposure Amortizing for Fair Top-k Recommendation

Tao Yang, Zhichao Xu, Qingyao Ai.

manuscript on arXiv, 2022

Research Projects

Fairness in Learning to Rank

Advisor: Dr. Qingyao Ai

05/2021 - Present

Model-agnostic Explaination for Blackbox Recommender System

Advisor: Dr. Qingyao Ai

05/2021 - Present

Conversational Product Search Agent

Advisor: Dr. Qingyao Ai

08/2021 - Present

The Usage of Textual Reviews in E-commerce Recommendation

Advisor: Dr. Qingyao Ai

09/2020 - 02/2021

The Usage of Behavioral Economics Principles in E-commerce Recommendation

Advisor: Dr. Yongfeng Zhang & Dr. Qingyao Ai 05/2019 – 05/2020

Service Conference Reviewer: CCL 2021, DLP-KDD 2021

Conference Subreviewer: KDD 2022, TheWebConf 2022

Journal Reviewer: TOIS

Skills **Programming**

Proficient in: Python, PhP

Familiar with: Java, C++, Matlab

Tools

PyTorch, Tensorflow, Spark, MapReduce, MongoDB, MySQL, LATEX