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. Qingyao Ai

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

Selected Publications

Understanding the Effectiveness of Reviews in E-commerce Top-N recommendation
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*

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.*

Research Projects

Model-agnostic Explaination for Blackbox Recommender System
Advisor: Dr. Qingyao Ai 02/2021 – Present
This project aims to provide explainability to recommender system in a model-agnostic fashion to improve users' trustness towards the blackbox neural recommender system.

Conversational Product Search Agent

Advisor: Dr. Qingyao Ai   02/2021 – Present

This project aims to improve existing conversational product search agent from two perspectives: risk between asking clarifying questions and recommendation; balance between performance and item exposure/fairness.

The Usage of Textual Reviews in E-commerce Recommendation

Advisor: Dr. Qingyao Ai   09/2020 – 02/2021

We designed deep neural network structures to explore the usage of textual reviews for top-N recommendation under E-commerce settings. This project leads to our papers in **ECIR 2020** and **ICTIR 2021**.

The Usage of Behavioral Economics Principles in E-commerce Recommendation

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

We explored the usage of behavioral economics principles for top-N recommendation under E-commerce settings. Our risk-aware model is based on vanilla matrix factorization setup and achieves better performance than SOTA economical recommendation models. This project leads to our paper in **CIKM 2020**.

Service
Conference PC Member: **CCL 2021**, **DLP-KDD 2021**
Journal Reviewer: **TOIS**

Industry Experience
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)

Skills
Programming
Proficient in: Python, PhP
Familiar with: Java, C++, Matlab

Tools
PyTorch, Tensorflow, Spark, MapReduce, MongoDB, MySQL, LaTeX