Bohan Zhang

Email: zbohan@umich.edu, Personal Page, School Page

Education

University of Michigan
Ph.D. in Information Science — Aug 2022 - Present
M.S. in Computer Science and Engineering — Aug 2020 - May 2022
- GPA: 4.00/4.00.

The Ohio State University — Aug 2017 - May 2020
B.S. in Computer Science and Engineering, Minor in Linguistics
- GPA: 3.99/4.00.

Xiamen University — Aug 2015 - July 2017
Major in Computer Science and Technology (Transferred out)
- GPA: 3.78/4.00, 90.87/100 (Rank: 2/91)

Research Experiences

Research Assistant, Dhillon's Research Group — May 2021 - Now
- Advisor: Paramveer Dhillon, Qiaozhu Mei
- Project: Improving group distributional robustness by learning to rank.
- Goals: 1) Disclosing the lack of group robustness of several NLP tasks; 2) Improving the robustness by up-weighting groups according to their performance rank 3) Design generalizable meta-learners to learn the rank of groups directly.

Research Assistant, Dhillon's Research Group — Dec 2022 - Now
- Advisor: Paramveer Dhillon, Yixin Wang
- Project: Dynamic sequence optimization in human-AI collaborative writing.
- Goals: learn a dynamic policy – a sequence of treatments, which are texts generated by humans, to optimize the quality of texts in human-AI collaborative writing.

Research Assistant, Blablablab Lab — Sep 2020 - Oct 2021
- Advisor: David Jurgens
- Project: Political Heterogeneity in Social Media and Its Implications for Behavioral Analysis.
- Goals: Understanding (1) how the choice in definition of a political user significantly influences behavioral analysis (2) how political users engage and interact with others (2) potential suspicious behavior of users, and (4) how users change their political leanings over time.

Research Assistant, NLP Lab at Texas A&M University — May 2019 - Aug 2019
- Advisor: Ruihong Huang
- Project: Predicting sentence deletions in text simplification via a functional discourse structure
- Goals: 1) Exploring how a functional discourse structure correlated with sentence deletions in document-level simplification 2) Using the structure to improve predicting sentence deletions.

Publications

[1] Kenan Alkiek, **Bohan Zhang**, and David Jurgens. Classification without (Proper) Representation: Political Heterogeneity in Social Media and Its Implications for Classification and Behavioral Analysis. In Findings of the Association for Computational Linguistics (**ACL '22**), pages 504–522, Dublin, Ireland. Association for Computational Linguistics. Link

[2] **Bohan Zhang**, Prafulla Kumar Choubey, and Ruihong Huang. Predicting Sentence Deletions for Text Simplification Using a Functional Discourse Structure. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (**ACL '22**), pages 255–261, Dublin, Ireland. Association for Computational Linguistics. Link

[3] Yingzi Bu*, Ruoxi Gao*, **Bohan Zhang***, Luchen Zhang, Duxin Sun. "CoGT: Ensemble machine

learning method and its application on JAK inhibitor discovery" **ACS Omega 2023** 8 (14), 13232-13242. Link

Working Drafts/Submissions

[1] Yachuan Liu*, **Bohan Zhang***, Qiaozhu Mei, Paramveer Dhillon. "Improving Group Distributional Robustness by Learning to Rank" *In preparation for EMNLP '23*

[2] Yachuan Liu*, **Bohan Zhang***, Qiaozhu Mei, Paramveer Dhillon. "Inverse Probability Weighting for Group Robustness and Distribution Shifts" *In preparation for NeurIPs '23*

Working/Teaching Experiences

Machine Learning Software Engineering, Initium.AI Inc. May 2021 - Aug 2021
- Deploy action sentence detection model for real-world applications with limited labels.

Instructor Assistant, The Ohio State University Jan 2019 - May 2020
- Course: CSE 2421 - Introduction to Low-Level Programming and Computer Organization

Honors & Awards

ACL Student Volunteer Award May 2022
Dean's List of Distinguished Students All Semesters
The Ohio State University
Fujian Calculus Contest third prize May 2016
Xiamen University, Fujian Province
College Scholarship May 2016
Xiamen University

Service

Reviewer for ACL 2023, WWW 2023
Program Committee Member of WWW 2023

Skills

Programming languages
Familiar with C, Python, Matlab, C#; Have knowledge in Java, JavaScript
Programming Tools
Pytorch, Linux, Parallel Computing (CUDA), OpenGL, WebGL
English Proficiency
TOEFL 107 (R:27, L:27, S:26, W:27)
GRE: V 157, Q 169