LEIJIE WANG

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EDUCATION

University of Washington — Seattle, USA
- o Ph.D. in Computer Science and Engineering — 2022–present
- o Advisor: Amy X. Zhang

Tsinghua University — Beijing, China
- o Major in Computer Science and Engineering; GPA 3.90/4.00, Ranked 4/225 — 2017–2022
- o **Tsinghua Presidential Scholarship** (Highest honor awarded to 10 undergraduates every year)
- o Admitted as the highest scorer among 300,000 students in Gaokao

New College, Oxford University — Oxford, United Kingdom
- o Visiting Student, Major in Computer and Philosophy; GPA 4.00/4.00 — 2019–2020

RESEARCH INTERESTS

Social Computing; Human-centered Machine Learning; Computer-Supported Cooperative Work; Fairness, Accountability, and Transparency

PUBLICATIONS

Leijie Wang, Steven Wu, Haiyi Zhu. How Are Machine Learning Based Online Content Moderation Systems Actually Used? Studying Community Size, Local Activity, and Disparity Treatment. *FAccT'22*

Hong Shen, **Leijie Wang**, Wesley Hanwen Deng, Ciell, Ronald Velgersdijk, Haiyi Zhu. The Model Card Authoring Toolkit: Toward Community-centered, Deliberation-driven AI Governance. *FAccT'22*

Will Epperson, Doris Jung-Lin Lee, **Leijie Wang**, Kunal Agarwal, Aditya Parameswaran, Marti Hearst, Dominik Moritz, Adam Perer. Leveraging Analysis History for Improved In Situ Visualization Recommendation. *EuroVis'22*

RESEARCH EXPERIENCE

Social Futures Lab, *University of Washington* — Seattle, USA
Advised by Amy X. Zhang — 08/2022 – Present

Project: Designing Privacy-Preserving Reporting Mechanism on End-to-End Encrypted Platforms
- o Aimed to understand the trade-off between privacy concerns of users and content moderation around the reporting functionality on E2EE platforms

Data Interaction Group (DIG), *Carnegie Mellon University* — Pittsburgh, USA
Advised by Adam Perer and Dominik Moritz — 06/2021 – 12/2021

Project: Visualization Recommendation with Analysis History
- o Aimed to recommend graphs to users by tracking the history of their analysis in the process of data exploration
- o Enhanced the recommendation system to make recommended graphs more informative and robust; Tracked the history of all commonly used Pandas functions and created new visualizations for these functions; Implemented unit tests to facilitate the system maintenance
- o Created a user study procedure that asks participants to perform exploratory data analysis by our tool and evaluate its performance

Social AI Group, *Carnegie Mellon University* — Pittsburgh, USA
Advised by Haiyi Zhu and Steven Wu — 06/2020 – 06/2022

Project 1: Facilitating Public Deliberation of Algorithmic Decisions
- o Aimed to help Wikipedia members address their competing values about a moderation algorithm through organized deliberation sessions. More details are available on the project wiki page
- o Designed an interactive interface to help Wikipedians better understand tensions among values of different stakeholders, select their preferred model, and share that model with others for further discussion; Ran deliberation-driven workshops in English and Dutch-speaking Wikipedia communities

Project 2: Exploring the Actual Use of Algorithmic Flagging Systems in Wikipedia
- o Aimed to understand how community norms influence people's actual use of content moderation algorithms; Provided a field evaluation of an ML-based algorithm in the socio-technical context of Wikipedia
- o Constructed a dataset from Wikipedia archives and exploited a causal inference method to identify several socio-technical factors that influence the actual use of algorithms in various communities, namely membership size and local edit activity

Project 3: Incorporating Fair Algorithms into the Python Toolkit FairLearn
- o Aimed to empower non-experts to access and deploy algorithms with fairness guarantees
- o Implemented the fair regression algorithm proposed in the paper [Agarwal et al.](#) and helped organize separate fair algorithms into a structured toolkit; Wrote API documentations and unit tests to increase accessibility

Knowledge Engineering Group (KEG), *Tsinghua University* Beijing, China
Advised by Tang Jie 10/2018 – 07/2019
   Project: Exploring Recommendation Algorithms Based on Networking Embedding Theories
- o Aimed to improve recommendation algorithms for WeChat's Top Stories feature
- o Cleansed data and implemented several recommendation algorithms from prior research to further our understanding of the large dataset

SELECTED AWARDS AND HONORS

- o **Tsinghua Presidential Scholarship, Tsinghua University** 2020
  Highest undergraduate scholarship awarded by Tsinghua University; Top 10 out of 3000+ undergraduates
- o **Finalist Award in the Mathematical Contest in Modeling** 2020
  Awarded to top 1% of all teams
- o **Yinghua Scholarship, Tsinghua University** 2019
  Full scholarship for one-year exchange program at University of Oxford, $66,000 in total
- o **Jiang Nanxiang Scholarship, Tsinghua University** 2019
  Awarded for overall excellence, top 1% of all students
- o **The First Prize Scholarship for 2017 Freshmen, Tsinghua University** 2017
  Awarded for the highest scorer among 300,000 students in the National College Entrance Examination

ADDITIONAL INFORMATION

Programming Skills
- o Python, HTML/CSS/JavaScript, C/C++, Java, R, MATLAB, LaTeX

Languages
- o Native in Mandarin; Fluent in English
- o TOFEL score 113 (Reading 30, Writing 29, Listening 29, Speaking 25)
- o GRE score 338 (Verbal 165, Quantitative: 169, Analytical Writing: 4.0)