Ziwei Gu

CONTACT INFORMATION	Email: zg48@cornell.edu Website: https://ziweigu.github.io/

RESEARCH INTERESTS

Human-Computer Interaction (HCI)
Natural Language Processing, Machine Learning, Data Mining, Algorithm Fairness

EDUCATION

Cornell University, Ithaca, New York

B.A. Computer Science, August 2017 – December 2020
B.A. Mathematics, August 2017 – December 2020
GPA: 3.83/4.00

PUBLICATIONS

Jing Nathan Yan, **Ziwei Gu**, Hubert Lin, and Jeffrey M Rzeszotarski. 2020. Silva: Interactively Assessing Machine Learning Fairness Using Causality. In CHI Conference on Human Factors in Computing Systems (CHI '20), April 25-30, 2020, Honolulu, HI, USA.

Ziwei Gu, Jing Nathan Yan, and Jeff Rzeszotarski. 2020. Understanding User Sensemaking in Machine Learning Fairness Assessment Systems. In WWW'21: The Web Conference 2021(WWW'21), April 19-23, 2021, Ljubljana, Slovenia.

Jing Nathan Yan, **Ziwei Gu**, and Jeffrey M Rzeszotarski. 2021. Tessera: Discretizing Data Analysis Workflows on a Task Level. In CHI'21: ACM CHI Conference on Human Factors in Computing Systems, May 8-13, 2021, Yokohama, Japan.

ACADEMIC RESEARCH

Cornell University, Ithaca, New York
Undergraduate Research Assistant   **June 2019 – May 2021**

- Designed, implemented, and evaluated Silva, an interactive machine learning fairness assessment tool that helps users find and reason about bias in their datasets and classifiers. [Paper]
- Performed segmentation analysis on various user actions in data analysis event logs, defined new similarity metrics, and conducted an initial evaluation against two benchmark algorithms. [Paper]
- Conducted "think aloud" user studies to identify sensemaking patterns in users' bias exploration with different debiasing tools; Compared the effectiveness of different tools through quantitative features generated from event logs and user study transcripts. [Paper]
- Adviser: Professor Jeffrey Rzeszotarski

PROFESSIONAL EXPERIENCE

Lyft, San Francisco, California
Data Scientist Intern   **June 2020 - July 2020**

- Estimated the opportunity and risk of Lyft Family (a new feature of Lyft) by exploring existing rides and payment data.
- Identified all household users of Lyft and analyzed their unique characteristics in terms of engagement, experience, etc.
- Clustered family riders and rides and recommended incentive products targeting each segment of users and use cases.

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