YIWEN ZHANG

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EDUCATION

University of Pittsburgh

Pittsburgh, PA

• Ph.D in Psychology (Cognitive) with Quantitative Minor,

09/2019 - 05/2024

• M.S. in Psychology (Cognitive)

09/2019 - 05/2021

Zhejiang University

Hangzhou, China

• B.S. in Psychology, GPA 3.88/4.0 (honored graduation, ranked #1 in Department of Psychology) 2015 – 2019

RESEARCH TOPICS

• I'm passionate about using randomized control experiments and computational models to investigate human learning and decision making, especially how people learn and make decisions from real-world observations.

SELECTED EXPERIENCE

Graduate Student Researcher, University of Pittsburgh

Sept 2019 – present

- Lead researcher on various projects on causal learning in real life. Designed randomized control experiments to investigate human causal inference.
- Performed large-scale data analysis and computational modeling including regression models and Bayes
 analysis. Developed computational models of human behavior, used simulations to test different hypothesis of
 human causal inference.
- Developed a smartphone-based app and a time-scheduling-reminder system for users to complete the experiments remotely and in their daily life. Shared the experiment as <u>a template</u> for designing, programming, and running Psychology experiments in the cloud, wrote tutorials and instructions.

UX Researcher Intern, Meta Platforms, Inc.

May 2022 – August 2022

- Lead researcher on WhatsApp Feature Awareness Project. Designed off-platform feature awareness surveys
 with 200+ questions including 60 main features on WhatsApp and investigated users' perceived need,
 awareness, comprehension, and usage of the main features.
- Survey results helped the team to **address several important questions**: (1) which feature need to be prioritized for improve; (2) how feature awareness changed over time; (3) the behavior patterns of younger users and users with low digital literacy; (4) features awareness comparison between WhatsApp and competitor apps.
- Presented the research results to 2 cross functional teams and **helped them make decisions on feature** improvement.

PUBLICATIONS & POSTERS

Zhang, Y. & Rottman, B. M. (under review). Casual Learning with Delays Up to 21 Hours. *Psychonomic Bulletin & Review*

Zhang, Y. & Rottman, B. M. (In preparation). Causal Learning with Interrupted Time Series Data.

Zhang, Y. & Rottman, B. M. (2021). Casual Learning with Delays Up to 21 Hours. *Proceedings of the 43rd annual conference of the cognitive science society.*

Zhang, Y. & Rottman, B. M. (2021). Casual Learning with Interrupted Time Series. *Proceedings of the 43rd annual conference of the cognitive science society.*

Zhang, Y., Yang, Z., Liang, J., Wu, F., Gao, Z. (2018, July). Object-based Attention, not Spatial Attention, is Critical for Encoding Feature Binding in Visual Working Memory. *14th Asia-Pacific Conference on Vision and the 3rd China Vision Science Conference*.

SIDE PROJECTS

An ACT-R model of Human Feedback Learning

March 2022 - May 2022

 Designed and developed an ACT-R model to simulate the interaction between reinforcement learning and working memory during human feedback learning.

A Machine Learning Approach to Predict Human Causal Judgement

March 2020 - May 2020

• Explored using machine learning classifiers to predict human causal judgement by comparing performance of different ML algorithms (Naïve Bayes, J48, LWL, SVM) by cross-validation. Trained and optimized a model by using bagging with J48 classifier to predict causal judgement in a psychology experiment

SKILLS

- Research methods: A/B test design, Survey design, Lab studies
- Stats expertise: Bayesian Modeling, Hierarchical and Mixed Effects Modeling, Categorical Data Analysis
- Working with data: R (tidyverse), Tableau, Python (numpy, pandas), d3.js, SQL, SPSS
- Web development: JavaScript, HTML/CSS, Vuejs, Flask, Github, Google Cloud, Google firestore