Yizhou "Harry" Tian

Research Interests

My research interest lies in human-AI collaboration. I aim to build more effective and responsible human-AI collaboration by leveraging human modeling and human-compatible AI.

EDUCATION

Ph.D. in Computer Science, Purdue University M.S. in Computer Science, University of Chicago 2023 - Present

2022

B.A. in Computer Science and Linguistics

2021

Research Experience

Purdue University

2023 - Present

Advisor: Ming Yin

West Lafayette, IN

• Work in progress: Investigating human-compatible AI explanations.

University of Chicago, Chicago Human+AI Lab

2021 - 2023

Advisor: Chenhao Tan

Chicago, IL

- Designed case-based decision support system using human-compatible representations, ran human studies on natural image and medical image datasets. [2]
- Work in progress: Developing more effective machine teaching protocols by modeling humans as contrastive learning models and KNN. [1]

University of Minnesota, REU

Summer 2020

Advisor: Zhiwei Steven Wu

Virtual

- Experimented on hyperparameter optimization methods on differentially private algorithms and concluded that Random Search outperforms Bayesian Optimization in the general case.
- Created and presented research poster in virtual National REU Poster Symposium.

University of North Texas, REU

Summer 2019

Denton, TX

• Learned and experimented with neural networks and text encoders.

PUBLICATIONS

- [1] *Han Liu, *Yizhou Tian, Chaoqi Wang, Shi Feng, Yuxin Chen, and Chenhao Tan. Contrastive knns as learners in machine teaching.
- [2] Han Liu, **Yizhou Tian**, Chacha Chen, Shi Feng, Yuxin Chen, and Chenhao Tan. Learning human-compatible representations for case-based decision support. In *ICLR*, 2023.

TEACHING EXPERIENCE

Teaching assistant positions:

Purdue University

• CS 17600: Data Engineering In Python

JNC International Summer School

• Latin American History

Honors & Awards

Industry Experience

FormFast Fall 2018

Software Engineer Extern

St. Louis, MO

• Shadowed developers in working process, learned software development basics

• Created blood bank management Windows App using C#

Relevant Skills

Programming Languages: Python, Tex, HTML5, C, Java, C# Frameworks & Tools: Pytorch, Django, Numpy, Pandas, git, LaTex

STUDY ABROAD EXPERIENCE

AIT Budapest

Fall 2019

Computer Science Study Abroad Program

Budapest, Hungary

LSE-PKU Summer School

Summer 2018

Coursework: Big Data: Data Analytics for Business and Beyond

Beijing, China