# Yizhou "Harry" Tian

# Research Interests

My research interest lies in in Human-AI interaction (HAI). I aim to building more effective and responsible human-AI collaboration by leveraging AI that model humans. Currently, I am interested in (i) designing human-compatible decision support systems and AI teaching frameworks and (ii) the gap between HAI experiments on laypeople and practitioners.

# **EDUCATION**

# University of Chicago

Sept 2021 – Dec 2022

M.S. in Computer Science, Pre-Doctoral program

Chicago, IL

• Relevant Coures: Fundamentals of Deep Learning, Natural Language Processing, Mathematical Foundations of Machine Learning, Human-Centered Machine Learning

# Carleton College

Sept 2017 – June 2021

B.A. in Computer Science and Linguistics

Northfield, MN

#### Research Experience

# Chicago Human+AI Lab, University of Chicago

Sep 2021 -

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. [1, 2]
- Work in progress: Building AI-driven tutorial for radiology residents training on prostate cancer diagnosis. Experimenting on contrastive learner models.

## REU at University of Minnesota

Jun – Aug 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.

#### REU at University of North Texas

Jun – Aug 2019

Denton, TX

• Learned and experimented with neural networks and text encoders.

#### REFERENCES

- [1] 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. **To Appear**.
- [2] Han Liu, **Yizhou Tian**, Chacha Chen, Shi Feng, Yuxin Chen, and Chenhao Tan. Towards effective case-based decision support with human-compatible representations. In *Proceedings of the 1st ICML 2022 Workshop on Human-Machine Collaboration and Teaming*, 2022.

### Honors & Awards

# Industry Experience

FormFast Nov – Dec 2022

Software Engineer Extern

St. Louis, MO

• Shadowed developers in working process, learned software development basics

• Created blood bank management Windows App using C#

### JNC International Summer School

June – Aug 2018

Latin American History course Teaching Assistant

Guangzhou, China

# SKILLS

Languages: Python, HTML5, C, Java,

Frameworks & Tools: Pytorch, Django, Numpy, Pandas, git

### STUDY ABROAD EXPERIENCE

AIT Budapest Sept – Dec 2019

Computer Science Study Abroad Program

Budapest, Hungary

LSE-PKU Summer School August 2018

Coursework: Big Data: Data Analytics for Business and Beyond Beijing, China