Hui Wei

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Education

Manning College of Information and Computer Sciences, UMass Amherst 2020 - Present
Ph.D. in Computer Science *GPA: 3.9/4.0*

Courant Institute of Mathematical Sciences, New York University 2017 - 2019
M.S. in Computer Science *GPA: 3.8/4.0*

Beijing University of Posts and Telecommunications 2013 - 2017
B.S. in Telecommunication Engineering *GPA: 3.8/4.0*

Work Experience

Research Scientist Intern May 2024 – August 2024
PAII.Inc *Palo Alto, CA*

- Improve the Reinforcement Learning algorithm (i.e. proximal policy optimization) for better alignment of Large Language Models (LLMs) with human preferences.
- Evaluate the alignment of LLMs with human preferences and assess their biases as automatic judges on summarization and multi-round conversation datasets.

Project Associate June 2019 – June 2020
NYU Langone Health *New York City, NY*

- Developed CNN and LSTM-based deep sequential models to predict disease onset using NYU EHR data.
- Assessed the diagnostic accuracy and fairness at clinics by comparing diagnosis with post-mortem autopsy results for Alzheimer's disease and Lewy body disease.

Publications

Hui Wei, Maxwell A. Xu, Colin Samplawski, James M. Rehg, Santosh Kumar, Benjamin M. Marlin. "Temporally Multi-Scale Sparse Self-Attention for Physical Activity Data Imputation." *Conference on Health, Inference, and Learning (CHIL)*. PMLR, 2024.

Maxwell A. Xu, Alexander Moreno, **Hui Wei**, Benjamin M. Marlin, James M. Rehg. "Retrieval-Based Reconstruction for Time-series Contrastive Learning." *12th International Conference on Learning Representations (ICLR)*, 2024.

Hui Wei, Arjun V. Masurkar, and Narges Razavian. "On Gaps of Clinical Diagnosis of Dementia Subtypes: A Study of Alzheimer's Disease and Lewy Body Disease." *Frontiers in Aging Neuroscience* 15 (2023): 1149036.

Awards and Honors

Student Spotlight, Neuroscience at UMass Amherst, 2023.
Merit Student Scholarship, Beijing University of Posts and Telecommunications, 2014-2017.

Academic Services

Reviewer, workshop on Learning from Time Series for Health, ICLR 2024 and NeurIPS 2022.
Evaluation committee, workshop on DATA'23 at Sensys 2023 & Buildsys 2023.

Teaching

Teaching Assistant, UMass Amherst January 2024 - May 2024
COMPSCI 250: Introduction to Computation *Amherst, MA*

- Led weekly discussion section, held office hours, and graded homeworks.

Technical Skills

Languages: Python, C/C++, Bash, LaTeX, Markdown, HTML/CSS
Libraries: PyTorch, NumPy, Matplotlib, Pandas, Scikit-Learn, Seaborn, SciPy
Tools: Linux, Git/GitHub