

Hao Yan

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RESEARCH INTERESTS

Natural Language Processing, Human-AI Interaction, Deep Learning

EDUCATION

George Mason University, Fairfax, USA (GPA 4.0 / 4.0)

Ph.D. (Advised by Prof. Ziyu Yao), Computer Science, 2021 - now

George Mason University, Fairfax, USA (GPA 3.67 / 4.0)

Master of Science, Computer Science, 2018 - 2020

Fujian Normal University, China

Bachelor of Engineering, Electronic and Information Engineering, 2013 - 2017

PUBLICATION

Learning to Simulate Natural Language Feedback for Interactive Semantic Parsing

ACL 2023

- Instead of collecting feedback from human annotators to train the model to understand Natural Language (NL) feedback for error correction intent, we investigated an alternative way to simulate NL feedback. The model trained using simulated feedback achieved a comparable error correction performance using fully human-annotated feedback.

RESEARCH EXPERIENCE

Graduate Research Assistant

Department of Computer Science, George Mason University, 2022 – now

- Assistant to Professor Ziyu Yao, conducting research in NLP.
- Developing effective methods that allow humans to communicate their goals and intentions to AI systems.
- Studying arising research questions such as ethical issues in machine generations and reinforcement learning with human feedback.

Detecting Abnormalities in Musculoskeletal X-rays

George Mason University, Spring 2020

- Computer Vision in-class final research project. Build a CNN-based classification model for Musculoskeletal X-rays abnormalities detection.

Prime Factoring Algorithm on IBM Q

George Mason University, Spring 2020

- Advanced Algorithm in-class final research project. Implement Shor's factoring algorithm on a quantum computer.
- Researching in quantum computing, learning basic ideas and concepts about quantum computing, and designing quantum circuits and algorithms to implement Shor's factoring algorithm.

WORK EXPERIENCE

Graduate Teaching Assistant

Department of Computer Science, George Mason University, 2020 – 2021

- Assistant to Professors in undergraduate CS classes.
- Writing automated script and unit tests, Assignments Grading, and Hosting Office Hours.

Front-end Developer

Bright Sky Tech Inc, February 2021 – August 2021

- Participate in the development and maintenance of an online grocery web-based application built by Angular, Firebase, Typescript, and Ionic.

HONORS / AWARDS

Distinguished GTA Award, Department of CS, GMU, 2022

Graduate Students Poster Award (Honorable Mention), GMU, 2022

Outstanding GTA Award, Department of CS, GMU, 2020, 2021