Laura Zheng

lyzheng@umd.edu | linkedin.com/in/laurayuzheng | github.com/laurayuzheng

Education

University of Maryland — College Park, MD
Computer Science PhD Student — *Aug. 2020 – Present*

University of Maryland — College Park, MD
B.S. in Computer Science — *Aug. 2016 – Dec 2019*

Work Experience

Intern — June 2019 - Aug 2020
NASA Goddard Space Flight Center / ADNET Systems — *Greenbelt, MD*

- Developed a publication metadata data collection pipeline for scientists at Goddard
- Applied named entity recognition and relationship extraction natural language processing models on research literature text for knowledge base construction
- Attended various Geoscience academic conferences to present my group's work

CRA-W DREU in Autonomous Driving — May 2019 – July 2019
University of North Carolina at Chapel Hill — *Chapel Hill, NC*

- Researched and developed vehicle accident scenarios in Unity Game Engine

Publications

Google Scholar: https://scholar.google.com/citations?hl=en&user=kGUj-dIAAAAJ

Differentiable Agent-based Traffic Simulation

- Ongoing research project under Dr. Ming Lin

Improving Generalization of Transfer Learning in Autonomous Driving — ICRA 2022

- Shivam Akhauri, **Laura Zheng**, Tom Goldstein, Ming Lin
- Project website: https://gamma.umd.edu/stltransfer
- *Currently under review for ICRA 2022*

Gradient-Free Adversarial Training Against Image Corruption for Learning-based Steering — NeurIPS 2021

- Yu Shen, **Laura Yu Zheng**, Manli Shu, Weizi Li, Tom Goldstein, Ming Lin

Enhanced Transfer Learning for Autonomous Driving with Systematic Accident Simulation — IROS 2020

- Shivam Akhauri, **Laura Zheng**, Ming Lin
- Project website: https://gamma.umd.edu/etladsas

Understanding ML in Earth Science: A Natural Language Processing Approach — AGU 2019

- **Laura Zheng**, Arif Albayrak, William Teng, Mohammad Khayat, Long Pham

Teaching

CMSC 420 - Data Structures — Fall 2021
CMSC 320 - Introduction to Data Science — Spring 2021
CMSC 131 - Introduction to Object-Oriented Programming — Fall 2020

Technical Skills

Languages: Python, Java, C#, Racket, C/C++
Developer Tools: Git, VS Code, Visual Studio, Eclipse, Sphinx Documentation, Anaconda