Yumian Cui

https://yumian-cui.github.io/

### EDUCATION

## University of Wisconsin Madison

Madison, WI

• Bachelor of Science, Data Science and Economics (Math); GPA: 3.785

Sep 2018 - May 2023

Email: ycui53@wisc.edu

Minor: Computer Science

### Programming Skills

• Language: Python, Java, R, C++, SQL, LaTeX, HTML, Julia, Matlab Technology: Microsoft (Excel, Word, PowerPoint), TensorFlow, Google Apps Script

# EXPERIENCE

## American Red Cross

Madison, WI

Salesforce & Data Volunteer, Fund Development

Feb 2022 - Present

- o Receive on-board training on Salesforce CRM systems and Power-BI
- Assist with Fund Development to manage donor data and keep track of fundraising data in CRM system

# **UW-Madison Statistics Learning Center**

Madison, WI

Stat 240 Introduction To Data Modeling I Peer Mentor

Aug 2021 - Dec 2021

- o Attended the Statistics Learning Center Training and the UW-Madison Tutor Development Conference
- $\circ$  **Helped** students learn by guiding them through problem-solving process in online drop-in office hours

# UW-Madison Department of Computer Science

Madison, WI

CS 220 Data Programming I Peer Mentor

Jan 2021 - Present

- Hold office hours to help students with labs/projects for general coding issues
- Lead lab section to go through lab code or assist TA to address student inquiries
- Design weekly quiz questions for course through collaboration in a team of 3

## Wisconsin Science and Computing Emerging Research Stars

Madison, WI

research fellow & assistant

Feb 2021 - Present

- Admitted as one of 19 school-wide to Google-funded, research mentorship program; advised by Prof. Vivak Patel
- Research optimization of RNN training by mitigating adjoint decay/explosion through a trainable penalty
- Write Design of Experiments periodically with text, graph, and tables that contain thoughts and findings
- Test the validity of method on synthetic or real-world datasets and provide coding support to network training

# Jiangyun Intelligence Ltd.

Remote, China

machine learning intern

Feb 2021 - May 2021

• **Applied** computer vision algorithms on real-world industry datasets, including tasks like classification, semantic segmentation, and defect detection in an Agile development environment; also learnt to label defect images

### **UW-Madison Department of Economics**

Madison, WI

LEAD@econ Mentor

Feb 2021 - May 2021

- Selected to support a freshman mentee by providing career/academic/life advice/resources
- Engaged in monthly leadership training with over 50 students to grow personally and professionally

### EconEx Research and Data Analysis Extern

Summer 2020

- o Selected for independent research project performing data analysis of Covid-19 situation in New York
- o Completed over 15 hours of training on data analysis tools (LinkedIn) and collaborated with the mentor
- o Created visualizations via Python & Excel and presented findings of Covid impact on retail trends in NYC

# PROJECTS

- Scientometric Analysis on 32 years of IEEE VIS papers: Assist in data-collection and data-cleaning which involves web-scraping and data merge & alignment techniques; conduct literature review and exploratory statistical analysis regarding cleaned data; work with two other PhDs under supervision of Prof. Yea-Seul Kim
- 2020 Data Challenge: Designed a machine learning model for heart failure prediction with another team member; Completed an analysis report and presented to professors & students; click hyperlink for more details
- Customer Churn prediction in Telecommunication industry: Developed algorithms for Telecommunication customer churn prediction; Evaluated model performance (80.6% accuracy, 65.8% precision, 55.7% recall, 83.3% AUC score for LR) via GridSearch (K-fold cross validation) and selected top features influencing customer retention