Yumian Cui

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EDUCATION

University of Wisconsin Madison   Madison, WI

- *Bachelor of Science, Data Science and Economics (Math); GPA: 3.785*   *Sep 2018 – Jun 2022*
  Minor: Computer Science

EXPERIENCE

- **American Red Cross**   Madison, WI

  Salesforce & Data Volunteer, Fund Development   *Feb 2022 - Present*
  - ○ **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*
  - ○ **Attended** the Statistics Learning Center Training and the UW-Madison Tutor Development Conference
  - ○ **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** from over 90 applicants to CS newly launched, Google-funded, research mentorship program
  - ○ **Research** with Prof.Vivak Patel about optimization of the backpropagation step to mitigate adjoint decay/explosion in recurrent neural network training through a trainable penalty on weight adjoints
  - ○ **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

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

PROJECTS

- **Scientometic Analysis on 31 years of IEEE VIS papers (on-going)**: 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

PROGRAMMING SKILLS

- **Languages**: Python, Java, R, SQL, LaTeX, HTML, Julia, C++   **Technologies**: Microsoft 365, TensorFlow