CHARLES CUI

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https://yccui.github.io/

EDUCATION

Northwestern University — Evanston, IL
Ph.D., Computer Science — 2020 - Present
Advisor: *Matthew Kay*

Oberlin College — Oberlin, OH
B.A., Mathematics, Computer Science — 2016 - 2020

Budapest Semesters in Mathematics — Budapest, HU
Study aborad — 2019 - 2019

PUBLICATIONS

Adaptive Assessment of Visualization Literacy. <u>Yuan Cui</u>, Lily W. Ge, Yiren Ding, Fumeng Yang, Lane Harrison, Matthew Kay. *IEEE VIS* 2023.

CALVI: Critical Thinking Assessment for Literacy in Visualizations. Lily W. Ge, <u>Yuan Cui</u>, Matthew Kay. *ACM CHI* 2023. (Best Paper Honorable Mention)

Can an Algorithm be My Healthcare Proxy?. Duncan McElfresh, Samuel Dooley, <u>Yuan Cui</u>, Kendra Griesman, Weiqin Wang, Tyler Will, Neil Sehgal, and John Dickerson. *Explainable AI in Healthcare and Medicine* 2021.

PROFESSIONAL EXPERIENCE

RegLab @ Stanford Law School — Stanford, CA
Graduate Fellow — 06/2023 - 08/2023
  Developing racial disparity estimation methods.

Carnegie Mellow University & Data Science for Social Good Foundation — Pittsburgh, PA
Data Science Fellow — 05/2022 - 08/2022
  Built a machine learning system to improve the routing of the 988 Suicide & Crisis Lifeline which serves 2,000,000+ callers per year. Obtained preliminary results that could help ~20, 000 more callers per year upon validation.

University of Chicago Consortium on School Research — Remote
Research Intern — 03/2022 - 05/2022
  Conducted clustering analysis on Chicago Public Schools data to aid the prediction of students' college graduation rate.

HomeRiser, Inc — Remote
Co-founder, Head of Data Science — 01/2021 - 10/2021
  Co-founded a real estate technology start-up that uses a novel business model powered by data science to provide more flexible and affordable ways to finance people's home ownership. Developed a financial model in Python that simulated cash flow and generated a detailed profit and losses statement.

PRESENTATIONS, WORKSHOPS, TUTORIALS

Conference Presentations

IEEE VIS. *"Adaptive Assessment of Visualization Literacy."* Oct 2023, Melbourne, Australia.

Data for Good. *"Improving the 988 Suicide & Crisis Lifeline's Service Through Better Call Routing."* Sept 2022, Seattle, WA. Joint with Irene Tang.

Tutorials

ACM FAccT. *"Data Externalities."* Mar 2021, Remote. Joint with Rediet Abebe, Mihaela Curmei, Andreas Haupt, and Yixin Wang.

HONORS AND AWARDS

HCI + Design Cluster Fellowship, Northwestern University 2022
Phi Beta Kappa, Oberlin College 2020
Elbridge P. Vance Scholar of Mathematics, Oberlin College . . . . 2016 - 2020

PROFESSIONAL SERVICE

Mechanism Design for Social Good Remote
Co-Organizer of MD4SG 2022 - present
Co-Organizer of MD4SG Data Economies Working Group 2021
Membership Manager of MD4SG 2021

TEACHING EXPERIENCE

Teaching Assistant

Northwestern University Evanston, IL
Computer Science Department 2021-2022
Design & Analysis of Algorithms, Mathematical Foundations of Computer Science

Oberlin College Oberlin, OH
Mathematics Department 2017-2020
Linear Algebra (2x), Discrete Mathematics (2x), Calculus II, Calculus I
Computer Science Department 2017
Introduction to Computer Science

TECHNICAL

Programming
R, Python, PostgreSQL, LaTeX

Organization
Github, Trello

Research Software and Skills
Qualtrics, Prolific