

Ming H. Wang

mwang583@wisc.edu | 216-414-5796 | [linkedin.com/in/ming-wang-b08485253/](https://www.linkedin.com/in/ming-wang-b08485253/) | github.com/Ming-Wang9 | mingwang.com

EDUCATION

University of Wisconsin at Madison

Madison, WI

Computer Science and Economics

Expected Graduation: May 2026

- Coursework: Operating Systems, Algorithms, Building User Interface, Database Management, Big Data, Intro to AI, Data Analytics for Economists, Money and Banking

SKILLS

- **Languages:** Python, Java, SQL, JavaScript, C++, C
- **Frontend Design:** Git, React, Npm, bootstrap, HTML/CSS, Figma
- **Backend Technologies:** Linux, Docker, Spark, RPC, Cassandra, Google Cloud

EXPERIENCE

Undergraduate Researcher

September 2024 - Present

Spatial Computing and Data Mining Lab

Madison, WI

- Conducting machine learning models for streamflow prediction, analyzing hydrological patterns in large-scale river networks.
- Implementing Empirical Mode Decomposition to extract Long Short-Term Memory and improve 30% of flood prediction accuracy
- Processing over 5GB of high-resolution spatiotemporal data using PyTorch library parallel computing techniques
- Optimizing data imputation models, enhancing prediction accuracy by 15%, reducing error rates in missing environmental data

Peer Mentor/Teaching Assistant

January 2023 - December 2023

UW-Madison

Madison, WI

- Held 15+ office hours weekly to provide support for students in Java/Python programming courses, ensuring effective assistance
- Assisted over 500 students each semester, guided them through coding challenges, debugging, and refining their solutions
- Participated and delivered lesson discussion and presentations to reinforce core programming concepts, facilitating active learning
- Received positive feedback from over 250 students for clear and effective communication and personalized support

PROJECTS

Personal Portfolio | [Link](#)

- Developed my personal website using React, Router, and Bootstrap to showcase experience with a emphasis on clean UI/UX design
- Utilized cross-device compatibility and seamless navigation, allowing users to access the site effortlessly on desktops, tablets, and mobile devices

Machine Learning | [Link](#)

- Enhanced decision-making speed by 25% in Tic-Tac-Toe using the Minimax, Alpha-Beta pruning computing via multiprocessing
- Achieved over 90% accuracy in image classification using Convolutional Neural Networks (CNNs) to identify potential matches by generating photorealistic faces based on key descriptions and facial features

eBay Database | [Link](#)

- Designed and implemented a relational database schema in MySQL to store and efficiently query large-scale eBay auction data
- Transformed over 900KB large JSON datasets into structured relational data, executing SQL queries for advanced analytics

Health Insurance Analysis in The USA | [Link](#)

- Analyzed 10 years of U.S. health insurance data using Census Bureau's APIs and Web Scraping, uncovering trends in coverages
- Leveraged Matplotlib, Seaborn, and GeoPandas to create interactive time-series geospatial visualizations, providing insights into healthcare spending inequalities