

Roujia Wang

rjwang@umich.edu | 734-412-9208 | Ann Arbor, MI 48105 | GitHub: <https://github.com/roujiawang>

Education

University of Michigan (U-M)

Ann Arbor, MI

- Master of Science in Computer Science (Expected May 2026)
- Bachelor of Science in Computer Science and minor in Statistics (Jan 2022 - May 2024, GPA: 3.95/4.0)
Coursework: Machine Learning, Artificial Intelligence, Web Systems, Database Management Systems.

Skills: C++, Java, Python, R, SQL, Git, Flask, HTML, Excel, Google Docs

Work Experience

H3D, Inc.

Ann Arbor, MI

Nuclear Engineer Intern

May 2023 - Aug 2023

- Engineered a speed control system in C++ in collaboration with the mechanical team, utilizing microcontroller launchpads, DC motors, and encoders, which resulted in significant progress in product development.
- Analyzed the position control of motorized gimbals for camera support using microcontroller board, exploring potential for future product design innovations.

Student Life Technology Solutions, U-M

Remote

Website Designer

Mar 2022 - May 2023

- Constructed entity relationship diagrams in Lucidchart by interacting with the Campus Information map interfaces and databases, which reinforced table usage interpretation and facilitated easier future database reorganization.
- Built GitHub Actions workflows, including shell scripts to merge Git branches only when specified PHP unit tests pass, customizing Continuous Integration to ensure code quality in GitHub repositories.
- Processed web support service requests on the Drupal platform, ensuring timely resolutions and striving to address customer issues on the same day.

ITS Teaching & Learning, U-M

Remote

Computer Consultant

Jun 2022 - Apr 2023

- Developed and enhanced features of web application Canvas App Explorer using Python, Django, Docker containers, and version control with Git and GitHub, yielding optimized views and improved user experience.
- Programmed Django models and commands to interact with Canvas API, automate information retrieval, and populate local MySQL databases, which enhanced data accessibility for web application users.

Research Experience

Ecological Neuroscience Lab, U-M

Ann Arbor, MI

Research Assistant

Jul 2024 - Present

- Managed and developed the SciFusion WordPress website from scratch, consolidating unorganized information from multiple email threads and documents into a structured and user-friendly platform.
- Researched and gathered detailed information on relevant research projects and resources, preparing content now ready to collect user feedback for future improvements and research.
- Maintained regular email communication with team members, technical personnel, and project affiliates to ensure the accuracy and timeliness of website information, enhancing project visibility and engagement.

The M3 Lab, U-M

Ann Arbor, MI

Research Assistant

Feb 2023 - May 2024

- Revised algorithms to analyze parameters of individuals' willingness to cooperate based on gaming data, improving the accuracy and reliability of behavioral analysis.
- Designed a PostgreSQL database schema and improved data pipelines using Flask, Pandas, and TypeScript, streamlining data flow and boosting overall system performance.

Project Experience

Foundations of Large Language Models (Course at U-M)

Jan 2024 - Apr 2024

- Completed individual programming projects on Google Colab to build, train, assess, and optimize various state-of-the-art language models for selective tasks, adapting these models for specific applications and achieving satisfying performance.