

Yining Shi

eddshi@umich.edu | (202) 725-6872 | Ann Arbor, MI

<https://eddshi.xyz/>

Education

University of Michigan

Bachelor of Science in Computer Science

Ann Arbor, MI

Aug. 2022 – Current

Honors & Awards

University of Michigan UROP Blue Ribbon Award

Ann Arbor, MI

Apr. 2024

University of Michigan University Honors

Ann Arbor, MI

2022 - 2024

Academic Presentations

University of Michigan UROP Symposium

Ann Arbor, MI

- **Shi, Y.**, Ashley, W., & Kon, P. *Unveiling the Nexus: Harnessing IoT Ecosystems for Evading Internet Censorship* [Poster]. University of Michigan UROP Spring Symposium, Ann Arbor, MI, United States, 2024. https://eddshi.xyz/papers/nexus_poster.pdf

Research Experiences

Computer Science and Engineering Department at the University of Michigan

Research Assistant, advised by Professor Ang Chen

Ann Arbor, MI

Jan. 2024 – Current

- Collaborating with Patrick Tser Jern Kon and Wyatt Ashley, advised by Prof. Ang Chen, on a novel circumvention model, *Nexus*, utilizing distributed Internet of Things network systems against on-path attacks, circumvent censorship, and disrupt traffic surveillance from nation-state censors.
- [Poster](#) was granted the Blue Ribbon Award at the UROP Symposium at the University of Michigan.

Censored Planet at the University of Michigan

Research Assistant, advised by Professor Roya Ensafi

Ann Arbor, MI

Jun. 2023 – Aug. 2023

- Worked under Professor Roya Ensafi and PhD student Anna Ablove regarding data collection and analysis on a research project investigating the ongoing global phenomenon of Geo-blocking against foreign Internet traffic.
- Worked as a full-stack developer for the lab's [official website](#), optimizing the data fetching mechanism to enhance server efficiency and reduce costs.

Civil and Environmental Department at the University of Michigan

Research Assistant & Developer, advised by Dr. Wentao Wang

Ann Arbor, MI

Oct. 2023 – Dec. 2023

- Collaborated with Dr. Wentao Wang to engineer a cost-effective IoT sensor-node solution using Microchip Curiosity Nano, targeting confined spaces with a sustained 100KHz transmission rate.
- Developed a comprehensive C-language firmware from scratch on Microchip Curiosity Nano for sensor data transmission, storage, and uploading via LTE, emphasizing cost efficiency.

Technical Skills

- **Languages:** Python, SQL, C++, C, HTML, CSS, Ruby, R, Javascript, Golang
- **Framework:** Flask, Node.js, Ruby on Rails
- **Development Tools:** VS Code, Docker, Git, MPLab, WireShark, WireGuard, Kali
- **Library:** Pandas, Matplotlib, scikit-learn