# Yining Shi

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#### Education

### University of Michigan, Ann Arbor, MI

Bachelor of Science in Computer Science

Aug. 2022 - Current

#### Honors & Awards

University of Michigan Blue Ribbon Award, Ann Arbor, MI University of Michigan University Honors, Ann Arbor, MI

Apr. 20242022 - 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]. (Blue Ribbon Best Posters Award)
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, University of Michigan, Ann Arbor, MI

Research Assistant, advised by Professor Ang Chen

Jan. 2024 - Current

- Collaborating with Patrick Tser Jern Kon, Wyatt Ashley, and Prof. Chen on a novel circumvention model, *Nexus*, utilizing distributed Internet of Things network systems against on-path attacks, circumvent censorship, and traffic surveillance from nation-state adversaries.
- Poster awarded Blue Ribbon at the UROP Symposium, University of Michigan.

# Censored Planet, University of Michigan, Ann Arbor, MI

Research Assistant, advised by Professor Roya Ensafi

Jun. 2023 – Aug. 2023

- Conducted research under Professor Roya Ensafi and PhD student Anna Ablove on Internet Measurement data collection and analyses for a project concerning the growing trend of Geo-blocking ingress traffic from outside networks by both heavily censored and traditionally "free" nation-states.
- Developed the lab's official website and optimized the data fetching mechanism to improve server efficiency and cut costs.

## Civil and Environmental Engineering Department,

University of Michigan, Ann Arbor, MI

Research Assistant & Developer, advised by Dr. Wentao Wang

Oct. 2023 - Dec. 2023

- Engineered an IoT sensor-node solution using Microchip Curiosity Nano for confined spaces, achieving a 100KHz transmission rate.
- Developed firmware in C for sensor data transmission, storage, and LTE-based uploading, with a focus on cost efficiency.

### **Technical Skills**

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