QI LING

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1857 Shirley LN Apt. A1, MI 48105

EDUCATION

- **University of Michigan**   **Expected graduation date: 2024**
  Bachelor's Degree in CS   **Overall GPA: 3.88/4**
  College of Engineering

- **Shanghai Jiao Tong University**   **Expected graduation date: 2024**
  Bachelor's Degree in ECE   **Overall GPA: 3.79/4**
  UM-SJTU Joint Institute

HONOR

- **Dean's Honor List**   **2023**
- **Jackson and Murial Lum Scholarship**   **2022**
- **SJTU Undergraduate Excellence Scholarship**   **2021**

PUBLICATIONS

- **Accurate Detection and Assessment of Speculative Gadgets**   **August 2023**
  Full paper in submission to ASPLOS'24
  Abstract accepted by MICRO'23 SRC
  Lead author: Qi Ling

- **Towards Fine-Grained, High-Coverage Internet Monitoring at Scale**   **June 2023**
  Accepted by APNet'23
  Second author: Qi Ling

RESEARCH EXPERIENCE

- **EFESLAB, University of Michigan**   **January 2023 - August 2023**
  Advisors: Shuwen Deng and Baris Kasikci
  Evaluating and assessing speculative gadgets in various applications and linux kernel.
  - Identified one key limitation of all state-of-the-art speculative vulnerabilities detectors – lack of exploitability evaluation.
  - Characterized the exploitability of vulnerabilities with two metrics.
  - Developed an LLVM compiler pass which instrumented a program to allow for runtime measurement of all vulnerabilities' exploitability.
  - Reduced the false positive rates of state-of-the-art detectors by up to 53%.

- **Network Measurement and System Lab, SJTU**   **August 2021 - August 2022**
  Advisor: Yibo Pi
  Towards find-grained, high-coverage Internet monitoring at scale.
  - Developed a latency measurement module based on the ultra-fast large-scale network scanning tool Zmap.
  - Studied limitations of conventional Internet monitoring strategies in accuracy and coverage.
  - Carried out large-scale experiments and proved the superiority of our proposed Internet monitoring strategy.