QI LING

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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**
  In Submission to ASPLOS'24 and MICRO 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.