

# QI LING

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## EDUCATION

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| <ul style="list-style-type: none"><li>• <b>University of Michigan</b><br/>Bachelor's Degree in CS<br/>College of Engineering</li></ul>          | <b>Expected graduation date: 2024</b><br>Overall GPA: 3.88/4 |
| <ul style="list-style-type: none"><li>• <b>Shanghai Jiao Tong University</b><br/>Bachelor's Degree in ECE<br/>UM-SJTU Joint Institute</li></ul> | <b>Expected graduation date: 2024</b><br>Overall GPA: 3.79/4 |

## HONOR

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| • <b>Dean's Honor List</b>                         | <b>2023</b> |
| • <b>Jackson and Murial Lum Scholarship</b>        | <b>2022</b> |
| • <b>SJTU Undergraduate Excellence Scholarship</b> | <b>2021</b> |

## PUBLICATIONS

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| <ul style="list-style-type: none"><li>• <b>Accurate Detection and Assessment of Speculative Gadgets</b><br/>In Submission to ASPLOS 2023<br/>Lead author: Qi Ling</li></ul>   | <b>August 2023</b> |
| <ul style="list-style-type: none"><li>• <b>Towards Fine-Grained, High-Coverage Internet Monitoring at Scale</b><br/>Accepted by APNet'23<br/>Second author: Qi Ling</li></ul> | <b>June 2023</b>   |

## RESEARCH EXPERIENCE

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| <ul style="list-style-type: none"><li>• <b>EFESLAB, University of Michigan</b><br/>Advisors: Shuwen Deng and Baris Kasikci<br/>Evaluating and assessing speculative gadgets in various applications and linux kernel.<ul style="list-style-type: none"><li>– Identified one key limitation of all state-of-the-art speculative vulnerabilities detectors – lack of exploitability evaluation.</li><li>– Characterized the exploitability of vulnerabilities with two metrics.</li><li>– Developed an LLVM compiler pass which instrumented a program to allow for runtime measurement of all vulnerabilities' exploitability.</li><li>– Reduced the false positive rates of state-of-the-art detectors by up to 53%.</li></ul></li></ul> | <b>January 2023 - August 2023</b> |
| <ul style="list-style-type: none"><li>• <b>Network Measurement and System Lab, SJTU</b><br/>Advisor: Yibo Pi<br/>Towards find-grained, high-coverage Internet monitoring at scale.<ul style="list-style-type: none"><li>– Developed a latency measurement module based on the ultra-fast large-scale network scanning tool Zmap.</li><li>– Studied limitations of conventional Internet monitoring strategies in accuracy and coverage.</li><li>– Carried out large-scale experiments and proved the superiority of our proposed Internet monitoring strategy.</li></ul></li></ul>   | <b>August 2021 - August 2022</b>  |