

Liuhuo Wan

✉ uqlwan4@uq.edu.au

in Liuhuo Wan

🌐 <https://cosunshine.github.io/>



Education

Ph.D., The University of Queensland (UQ), Australia

Apr 2022 – Oct 2025 (Expected)

Major: **Cybersecurity**, School of Electrical Engineering and Computer Science

Supervisor: Associate Professor **Guangdong Bai**

M.Sc., National University of Singapore (NUS), Singapore

Sep 2018 – Jun 2019

Major: Computer Science, School of Computing

GPA: 4.0/5.0

B.Sc., Dalian University of Technology (DUT), China

Sep 2014 – Jun 2018

Major: Software Engineering, School of Software

GPA: 88/100

Research Interests



- **Software Engineering:** Utilising large language models (LLMs) and other machine learning (ML) techniques, along with static and dynamic analysis methods, for software testing and analysis.
- **Software Security:** Analysis and testing of network, mobile, and IoT security.

Research Publications



- **C1 - [MobiCom'25]** Z. Li, C. Yan, **L. Wan**, H. Zhuang, P. Hu, G. Bai, Y. Shen, "WinSpy: Cross-window Side-channel Attacks on Android's Multi-window Mode," in Proceedings of the 31st Annual International Conference On Mobile Computing And Networking, 2025. **Accepted to appear.**
- **C2 - [WWW'25]** C. Yan, B. Guan, Y. Li, M. H. Meng, **L. Wan**, G. Bai, "Understanding and Detecting File Knowledge Leakage in GPT App Ecosystem," in Proceedings of the ACM on Web Conference 2025.
- **C3 - [ASE'24]** C. Yan, R. Ren, M. H. Meng, **L. Wan**, T. Y. Ooi, and G. Bai, "Exploring ChatGPT App Ecosystem: Distribution, Deployment and Security," in Proceedings of the 39th IEEE/ACM International Conference on Automated Software Engineering, 2024. **ACM SIGSOFT Distinguished Paper Award.**
- **C4 - [WWW'24]:** **L. Wan**, K. Wang, K. Mahadewa, H. Wang, and G. Bai, "Don't Bite Off More than You Can Chew: Investigating Excessive Permission Requests in Trigger-Action Integrations," in Proceedings of the ACM on Web Conference 2024.
- **C5 - [WWW'24]:** **L. Wan**, K. Wang, H. Wang, and G. Bai, "Is It Safe to Share Your Files? An Empirical Security Analysis of Google Workspace," in Proceedings of the ACM on Web Conference 2024.
- **C6 - [ICECCS'24]** **L. Wan**, C. Yan, M. H. Meng, K. Wang, and H. Wang, "Analyzing Excessive Permission Requests in Google Workspace Add-Ons," in International Conference on Engineering of Complex Computer Systems, 2024.

- C7 - [ADMA'22] **L. Wan**, Y. Zhang, R. Li, R. Ko, L. Hoffman, and G. Bai, "SATB: A Testbed of IoT-Based Smart Agriculture Network for Dataset Generation," in International Conference on Advanced Data Mining and Applications, Springer, 2022. **Best Paper Runner Up Award.**



Teaching Experience

- 2022  **Casual Academic**, CSSE7610 - Concurrency: Theory and Practice
- 2023  **Casual Academic**, COMP3320 - Vulnerability Assessment and Penetration Testing
Responsibilities included designing assignments and problem sets, delivering tutorials and lab sessions, and evaluating student submissions and final exams.









Funded Projects

- UQ Cyber  Cyber Seed Project: Security Investigation in Queensland Smart Agriculture. **My role:** included contributing to the research and delivering the audit presentation.
- DP  Australian Research Council Discovery Projects: Security and Privacy Compliance in the Emerging Web App Ecosystem. **My role:** my PhD research is embedded within my supervisor's ARC Discovery Project (DP), where I am responsible for project design and academic deliverables.

Recognized Security Contributions

- Google  Our discovery of the critical security vulnerabilities in Google Workspace was acknowledged by Google, and we were awarded a bug bounty.
- IFTTT  Our findings on suspicious permissions were acknowledged by IFTTT, one of the most widely used IoT integration platforms.

Honors and Awards

- 2025  **Richard Jago Memorial Prize**, School of Electrical Engineering and Computer Science, Australia, \$6883
-  **Scholarship**, UQU Postgraduate Bursary Program, Australia, \$500
- 2024  **Travel Grant**, UQ ITEE, Australia, \$2000
-  **Scholarship**, UQU Postgraduate Bursary Program, Australia, \$500
- 2023  **Bug Bounty Program**, Google **Bug Hunter Reward**, America, \$800
- 2019  **Scholarship**, Tuition Fee Scholarship, Singapore
- 2018  **Merit Award**, Outstanding Graduate, China
- 2016  **Scholarship**, National Scholarship, China

Talks

- T1 - UQ Cybersecurity Seed Funding Talk, Cyber Security in Smart Agriculture, July, 2024
- T2 - Research Talk at NUS, Security and Privacy of Web-based Collaborative Platforms, May, 2024

- **T3 - WWW Conference**, Two Oral Presentations, May, 2024
- **T4 - ADMA Conference**, A Testbed of IoT-based Smart Agriculture Networks, November, 2022

Mentoring Experience

Master Students

Guokai Tang, University of Queensland -> Now: Ph.D. Student at Huazhong University of Science and Technology.

Zicong Liu, University of Queensland, Topic: A Study of Privacy in Team Collaboration Platforms.

Zeng Li, Shandong University, Topic: Side-channel Attacks on Android's Multi-window Mode.

Jieping Liu, University of Queensland, Topic: Investigating Security Vulnerabilities in the GitHub Ecosystem.

Professional Services

Sub-Reviewer:

- The International Conference on Software Engineering (ICSE), 2025
- The Network and Distributed System Security Symposium (NDSS), 2024
- The ACM International Conference on the Foundations of Software Engineering (FSE), 2024
- The ACM SIGSAC Conference on Computer and Communications Security (CCS), 2024
- The International Conference on Engineering of Complex Computer Systems (ICECCS), 2023
- IEEE/ACM International Conference on Automated Software Engineering (ASE), 2023

External Reviewer:

- The ACM Conference on Data and Application Security and Privacy (CODASPY), 2024

Reviewer:

- IEEE Transactions on Dependable and Secure Computing (TDSC)
- IEEE Transactions on Services Computing (TSC)

Collaborators



Guangdong Bai, Associate Professor at University of Queensland

Haoyu Wang, Professor at Huazhong University of Science and Technology

Kailong Wang, Associate Professor at Huazhong University of Science and Technology

Yiran Shen, Professor at Shandong University

Industry Experience

- | | |
|-------------|---|
| 2019 – 2022 |  Software Developer at Shopee
Designed algorithms for recommendation systems; proficient in deep learning and machine learning |
| 2019 – 2019 |  Research Intern at NUS Suzhou
Developed machine learning frameworks widely adopted across the institute. |