# Leo Zhang

## Curriculum Vitae

#### About Me

Position Senior Lecturer

Affiliation School of Information and Communication Technology

Griffith University

Address Room 1.50, Building G09, 1 Parklands Dr, Southport, QLD 4215

E-mail leo.zhang@griffith.edu.au

Homepage https://leozhangcs.github.io/

### Research Interests

Trustworthy Adversarial/poison attack and defense of ML/DL, IP protection of ML/DL AI model, privacy leakage and protection of AI systems, fairness, explainability.

Secure Privacy preserving computation, storage auditing, access control, blockchain-Computing related applications, cloud/IoT-related secure multiparty computation task.

Multimedia Watermarking/data hiding, design/cryptanalysis of multimedia cryptosystem, Coding and selective encryption, perceptual encryption, joint compression-encryption, secret Security entropy coding, signal processing in the encrypted domain.

## Education

2019 - 2021 Graduate Certificate of Higher Education, Deakin University, Australia.

Sep. 2013 - Doctor of Philosophy in Electronic Engineering, City University of Hong

Oct. 2016 Kong, Hong Kong SAR, CGPA - 4.3 (out of 4.3).

Sep. 2009 - Master of Science in Mathematics, Xiangtan University, Hunan Province,

Jun. 2012 China, CGPA - 3.77 (out of 4).

Sep. 2005 - Bachelor of Science in Mathematics, Xiangtan University, Hunan Province,

Jun. 2009 China, CGPA - 3.5 (out of 4).

## Honors and Awards

- 2021 Australian Information Security Association (AISA) Researchers of the Year Award for the Development of Australian Cyber Criteria Assessment
- 2021 Teaching and Learning Award, School of Information Technology, Deakin University for excellence in aligning courses with industry certifications
- 2021 International and Partnership Award, School of Information Technology, Deakin University - for excellence in enriching international student experience through online engagement activities
- 2020 Team Award for international student engagement, School of Information Technology, Deakin University

- 2019 Research Impact Award, School of Information Technology, Deakin University
- 2018 Early Career Research Performance Award, School of Information Technology, Deakin University
- 2013 2016 The Outstanding Academic Performance Award for Research Degree Students of City University of Hong Kong for three consecutive years
  - 2014 Active Residence Award for 2013-2014 Semester B, City University of Hong Kong
  - 2013 Excellent Master Degree Thesis of Hunan Province
  - 2012 The Presidential Award for Excellence of research students of Xiangtan University (0.5%)
  - 2012 Excellent master graduate of Hunan Province

# Research and Working Experience

- Mar. 2023 Senior Lecturer in Security of School of Information and Communication Technology, Griffith University, QLD, Australia.
- Nov. 2022 Senior Lecturer in Security and Networking of School of Information Technology, Feb. 2023 Deakin University, VIC, Australia.
- Jan. 2018 Lecturer in Security and Networking of School of Information Technology, Deakin Nov. 2022 University, VIC, Australia.
- Sep. 2016 Postdoctoral researcher at the Department of Computer Science of City Univer-Sep. 2017 sity of Hong Kong under the supervision of Prof. Cong Wang (IEEE Fellow) and Prof. Kui Ren (IEEE Fellow, ACM Fellow).
- Mar. 2016 Research assistant at the Faculty of Science and Technology of University of Sep. 2016 Macau under the supervision of Prof. Jiantao Zhou.
- Apr. 2015 Visiting scholar to the Research Center on Electronic Systems of the University Jul. 2015 of Bologna and at the Department of Engineering of the University of Ferrara under the supervision of Prof. Gianluca Setti (IEEE Fellow) and Prof. Riccardo Rovatti (IEEE Fellow).
- Jul. 2012 Engineer at the State Grid Electric Power Research Institute of China. Aug. 2013

# Projects

- 2025 2028 Co-Investigator, Ensuring reliable deployment of deep neural network models, Linkage Projects (LP240100315), Australian Research Council, Australia. (ARC: AUD \$429,000, Industry: AUD \$180,000).
- 2025 2027 Co-Investigator, Copyright protection of deep neural network models based on watermarking, Discovery Projects (DP250102634), Australian Research Council, Australia. (Total: AUD \$510,000).
- 2025 2027 Co-Investigator, AI-Quantum Nexus: Revolutionizing Group Communication for Large Sport Events, Quantum 2032 Challenge Grant Program, Department of Environment, Science and Innovation, Australia. (Total: AUD \$999,300).
  - 2025 Sole Investigator, Cyber Security Microcredentials Pilot in Higher Education Grant, Department of Education, Australia. (Total: AUD \$250,000).

- 2024 Co-Investigator, High-end GPU server for AI research: Nvidia DGX A100, Research Infrastructure Program, Griffith University (Total: AUD \$300,000).
- 2023 Sole Investigator, Cryptographically Enhanced Watermarking for Copyright Protection of Deep Neural Network Models, New Researcher Grant, Griffith University (Total: AUD \$20,000).
- 2022 Sole Investigator, Cryptoanalysis of Prism: A full decentralized user authentication mechanism, CSRI Collaboration Grants Scheme, Deakin University (with Tide Foundation, Total: AUD \$15,000).
- 2022 Sole Investigator, Towards provable-secure proactive defence against neural model stealing attacks, CSRI Collaboration Grants Scheme, Deakin University (Total: AUD \$11,722).
- 2020-2021 Co-Investigator, Development of Australian Cyber Criteria Assessment, Cyber Security Research Centre Limited (with QuintessenceLabs Pty Ltd., Total: AUD \$187K).
- 2019-2021 Co-Investigator, Cyber-Safe Connected Vehicles: Ensuring Secure, Trusted, and Robust Cooperative Automotive Systems, Automotive Engineering Graduate Program of the Department of Industry, Innovation and Science, Australia (with Bosch Australia Pty Ltd., Total: AUD \$494K)
  - 2019 Sole Investigator, Storing Media in Public Cloud: Overcome Privacy and Copyright Challenges, Research Grants Scheme of Faculty of SEBE, Deakin University (Total: AUD \$5K).
  - 2018 Sole Investigator, Minor Equipment Scheme, Faculty of Science Engineering and Built Environment, Deakin University (Total: AUD \$22,844.80)
- 2017 2019 Sole Investigator, Research on the Secrecy of Compressed Sampling and its Application to IoT, Natural Science Foundation of China (Total: RMB 260K = AUD \$50K).

## Professional Memberships and Activities

Professional Member of IEEE, IEEE Cloud Computing Society, IEEE Signal Processing So-Member- ciety and IEEE Circuits and Systems Society; Member of ACM; Member of Ausships tralian Computer Society (ACS); Member of Australian Information Security

tralian Computer Society (ACS); Member of Australian Information Security Association (AISA); EC-Council Certified Ethical Hacker (CEH); EC-Council Certified Security Analyst (ECSA);

Associate Editorial member for: IEEE Transactions on Dependable and Secure Computing Editor (since 2023, CCF A/Scimago Q1), IEEE Transactions on Multimedia (since 2024, CCF B/Scimago Q1), International Journal of Bifurcation and Chaos (2019-2022, IF 2.145, Scimago Q1), Security and Communication Networks (since 2020, IF 1.288, Scimago Q2)

Guest Editor IEEE Journal of Biomedical and Health Informatics (2022, Scimago Q1), Complexity (2021, Scimago Q1), Signal Processing-Image Communication (2020, Scimago Q2), International Journal of Distributed Sensor Networks (2019, Scimago Q2), Security and Communication Networks (2018-2024, Scimago Q2);

- Organising Ithings-2018 (Workshop Chair), ATIS-2019 (Program Chair), CIMSS-2023 Committee (Workshop Chair), ProvSec-2024 (General Chair), PAKDD-2025 (Survey Track Chair), RAID-2025 (Local Organisation Chair), IWQoS-2025 (Local Co-Chair).
- Program NSS 18-22 (core b); ML4CS 19; DSC 19; GPC 20 (core c); EAI Qshine 20 (core Committee c); ISSRE 20 (core a); PRDC 20-24 (core b); MSN 21; BlockApp 20-21; CPSCom 21; NeurIPS 22, 24-25 (core a\*); ACM MM 21-24 (core a\*); ICME 23 (core a); CVPR 23-25 (core a\*); IJCAI 22-25 (core a\*); ICCV 23, 25 (core a\*); ECCV 24 (core a\*); ICML 24-25 (core a\*); AAAI 22-25 (core a\*); CIKM 24-25 (core a); PETS 25 (core a); AsiaCCS 25 (core a); ICLR 25 (core a\*).

# Teaching Experiences

- 2025 3012ICT Cryptography; 3015ICT Trustworthy AI; 2007ICT/7019ICT Cyber Security Risk Management & Standards
- 2024 3015IC/7017ICT Trustworthy AI; 1811ICT/2807ICT/7001ICT Programming Principles; 2007ICT/7019ICT Cyber Security Risk Management & Standards
- 2023 1811ICT/2807ICT/7001ICT Programming Principles
- 2022 SIT728 Blockchain Technologies and Real-World Applications; SIT182 Real-World Practices for Cyber Security; SIT379 Ethical Hacking; SIT704 Advanced Topics in Digital Security
- 2021 SIT379 Ethical Hacking; SIT704 Advanced Topics in Digital Security; SIT281 Cryptography; SIT102 Introduction to Programming
- 2020 SIT379 Ethical Hacking; SIT704 Advanced Topics in Digital Security; SIT281 Cryptography; SIT202 Networks and Communications
- 2019 SIT379 Ethical Hacking; SIT281 Cryptography; SIT102 Introduction to Programming
- 2018 SIT379 Ethical Hacking; SIT281 Cryptography; SIT703 Advanced Digital Forensics

#### Recent Publications

- Citations: 4500+, h-index: 36 (Please refer to my Google Scholar profile for the complete list)

  \* denotes the X. Feng, H. Zhang, Y. Zhang, L. Y. Zhang\*, S. Pan, BiMark: Unbiased Multilayer corresponding Watermarking for Large Language Models, in ICML, 2025. (core a\*)
  - author. Y. Zhang, Y. Zhou, T. Li, M. Li, S. Hu, W. Luo, L. Y. Zhang, Secure Transfer Learning: Training Clean Models Against Backdoor in (Both) Pre-trained Encoders and Downstream Datasets, in Oakland, 2025. (core a\*)
    - Z. Gong, Y. Zhang, L. Y. Zhang\*, Z. Zhang, Y. Xiang, S. Pan, Not All Edges are Equally Robust: Evaluating the Robustness of Ranking-Based Federated Learning, in Oakland, 2025. (core a\*)
    - X. Mo, Y. Zhang, L. Y. Zhang\*, W. Luo, N. Sun, S. Hu, S. Gao, Y. Xiang, Robust Backdoor Detection for Deep Learning via Topological Evolution Dynamics, in Oakland, 2024. (core a\*)
    - Y. Zhang, S. Hu, **L. Y. Zhang**, J. Shi, M. Li, X. Li, W. Wan, H. Jin, Why Does Little Robustness Help? A Further Step Towards Understanding Adversarial Transferability, in Oakland, 2024. (core a\*)