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💻 <https://waixiu.github.io/>



Education

- 2015 – 2020 📚 **Doctor of Philosophy**, supervised by Prof. Sherman S. M. Chow.
Department of Information Engineering, The Chinese University of Hong Kong.
PhD Thesis Title: “Secure and More Practical Access Control Encryption”
PhD Committee: Reihaneh Safavi-Naini (U. Calgary), Pascal O. Vontobel, Guoliang Xing, Raymond W. H. Yeung, Yingjun Angela Zhang (CUHK)
- 2013 – 2014 📚 **Master of Science**, Department of Computer Science, City University of Hong Kong.
Projects: “Who will be the Winner of Future Internet: ICN, SDN or DTN?” and “Versatile Storage System Based Video Transmission”, supervised by Jianping Wang.
- 2008 – 2012 📚 **Bachelor of Engineering**, Computer Science and Technology (Major)
 📘 **Bachelor of Art**, Translation, English (Minor)
Southwest University, China

Employments

- 2021.04 – present 📚 **Associate Professor**, School of Cyber Science and Engineering, Huazhong University of Science and Technology
- 2021.01-2021.03 📚 **Visiting Scholar**, School of Science and Engineering, the Chinese University of Hong Kong (Shengzhen)
- 2014.10 – 2015.07 📚 **Research Assistant**, Department of Computer Science and Engineering, Hong Kong University of Science and Technology

Research Publications

Journal Articles

- 1 X. Wang, S. Wang, Y. Li, F. Fan, S. Li, and X. Lin, “Differentially private and heterogeneity-robust federated learning with theoretical guarantee,” *IEEE Transactions on Artificial Intelligence*, 2024.
- 2 X. Wang, M. Yu, Y. Wang, *et al.*, “Attribute-based access control encryption,” *IEEE Transactions on Dependable and Secure Computing*, 2024.
- 3 Y. Zheng, W. Zhang, W. Song, X. Wang, and C. Fu, “Encrypted video search with single/multiple writers,” *ACM Transactions on Multimedia Computing, Communications and Applications*, vol. 20, no. 9, pp. 1–23, 2024.

Conference Proceedings

- 1 Z. Guo, Y. Wang, X. Jin, X. Wang, Y. He, and Y. Dai, “Efficient and verifiable multi-server framework for secure information classification and storage,” in *International Conference on Information Security and Cryptology*, Springer, 2024, pp. 191–210.
- 2 S. Wang, Y. Xu, Y. Yuan, X. Wang, and T. Q. S. Quek, “Boosting semi-supervised federated learning with model personalization and client-variance-reduction,” in *ICASSP 2023-2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, IEEE, 2023, pp. 1–5.

- 3 Y. Zheng, W. Song, M. Du, *et al.*, “Cryptography-inspired federated learning for generative adversarial networks and meta learning,” in *International conference on advanced data mining and applications*, Springer, 2023, pp. 393–407.
- 4 X. Wang and S. S. M. Chow, “Cross-domain access control encryption: Arbitrary-policy, constant-size, efficient,” in *2021 IEEE Symposium on Security and Privacy (SP)*, IEEE, 2021, pp. 748–761.
- 5 X. Wang, H. W. Wong, and S. S. M. Chow, “Access control encryption from group encryption,” in *International Conference on Applied Cryptography and Network Security*, Springer, 2021, pp. 417–441.
- 6 S. S. M. Chow, R. W. Lai, X. Wang, and Y. Zhao, “Privacy preserving credit systems,” in *International Conference on Network and System Security*, Springer, 2016, pp. 184–199.
- 7 C. Zhang, D. Cash, X. Wang, X. Yu, and S. S. M. Chow, “Combiners for chosen-ciphertext security,” in *International Computing and Combinatorics Conference*, Springer, 2016, pp. 257–268.
- 8 T. Zhang, X. Wang, and S. S. M. Chow, “Privacy-preserving multi-pattern matching,” in *International Conference on Security and Privacy in Communication Systems*, Springer, 2016, pp. 199–218.

Teaching

Lecturer in HUST

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|-----------|---|
| SCSo121 | Modern Cryptography professional core course for year 2 students
2022 Spring, 2023 Spring, 2024 Spring, 2025 Spring. |
| | Course Design of Cryptography professional core course for year 3 students
2021 Fall, 2022 Fall, 2023 Fall. |
| SCSo281 | Advanced Cryptography professional selective course for year 3 students
2021 Fall, 2022 Fall. |
| SCSoo49 | Privacy Protection and Cryptography Applications in the Internet of Things (IoT)
professional selective course for year 3 students
2024 Spring, 2025 Spring. |
| SCSo411 | Domestic Database Technology professional selective course for year 3 students
2024 Spring. |
| 920131016 | Modern Cryptography professional core course for postgraduate students
2022 Fall, 2024 Fall, 2025 Fall. |
| 920131042 | Data Security and Privacy Protection professional selective course for postgraduate students
2023 Fall, 2024 Fall, 2025 Fall. |

TA in CUHK

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| IERG 5310 | Security and Privacy in Cyber Systems 2019 Fall. |
| Engg 2602C | Engineering Practicum 2017 Spring, 2019 Fall. |
| IERG 4130 | Introduction to Cyber Security 2016 Spring, 2018 Spring. |
| IERG 3080 | Information & Software Engineering Practice 2015 Fall, 2016 Fall, 2017 Fall, 2018 Fall. |

Academic Activities

Reviewers

- 2015-2025  CRYPTO, ASIACRYPT, TDSC, T-IFS, Infocom, ESORICS, CT-RSA, ACNS, GlobeCom, AsiaCCS, SecureComm, AsiaPKC, CANS, ICPADS, ISC, ISPECS, ProvSec, ICASSP, ICICS, IWSEC, DSC, C₂SI, JISA, IET Information Security, etc.

PC or TPC Member

- 2020-2025  ICICS, IEEE ICC, GlobalComm, TrustCom, Ubisec, AC₃, Infocom AidTSP, etc.

Session Chair

- 2023  ASIACRYPT 2023, ISPA 2023.

Awards and Achievements

- 2023  **Top 3% paper recognition**, IEEE International Conference on Acoustics, Speech, and Signal Processing
- 2015-2020  **RGC full scholarship**, CUHK
- 2014  **Graduate with distinction**, City University of Hong Kong