Resume of Mingwu ZHANG

Basic Information



School : Gender: Date of Birth: Title: Education: Tutor: Email: Interest of research: School of Computer Science Male Professor Ph.D of Engineering Phd and Master degree scauzhang@gmail.com Information Security, AI, Big-data

Visiting Experience

2010/08-2012/09, JSPS Fellow/ Postdoctoral, Kyushu University, Japan; 2015/05-2016/06, Visiting scholar, University of Wollongong, Australia;

Representative Projects

- [1] JSPS, "Privacy-carrying Cryptography and its Applications in Decentralized Trust Systems", Japan, Project leader.
- [2] NSFC, "Research on Witness Encryption based on Relationship Language on NP Complete", China, Project leader.
- [3] NSFC, "Crowdsensing Security based on Blockchain", Adjunct Project leader.
- [4] NSFC, "Key Techniques for Provably Secure Program Obfuscations". China, Project leader.
- [5] NSFC, "Research on Leakage-Resilient Generalized Identity-based Cryptography and its Provable Security". China, Project leader.
- [6] NSFC, "Functional Encryption Schemes with Privacy Preservation". China, Project leader.
- [7] Key Research and Development Program of Hubei Province, "Monitoring Intelligence Analysis in Blockchain Security", China, Project leader.
- [8] "Detection and Analysis for Malicious Network Traffic", China, Project leader.
- [9] Natural Science Foundation of Hubei Province, "*Privacy Preservation in Present of Information Protection*", China, Project leader.
- [10] Natural Science Foundation of Guangdong Province, "Research on Reputation Model of Internet-of-Things with Privacy Protection", China, Project leader.

Representative Articles (More refer DBLP and Google Scholar)

- Mingwu Zhang, Shijin Chen, Jian Shen and Willy Susilo. "PrivacyEAFL: privacy-enhanced aggregation for federated learning in mobile crowdsensing". *IEEE Transactions on Information Forensics and Security*, 18:5804-5816 (2023)
- [2] **Mingwu Zhang**, Yu Chen and Willy Susilo. "Decision tree evaluation on sensitive datasets for secure e-healthcare systems". *IEEE Transactions on Dependable and Secure Computing*, 20(5): 3988-4001(2023)
- [3] Hua Shen, Ge Wu, Zhe Xia, Willy Susilo, **Mingwu Zhang***. "A privacy-preserving and verifiable statistical analysis scheme for an e-commerce platform". *IEEE Transaction on Information Forensics and Security* 18:

2637-2652,2023

- [4] Mingwu Zhang, Mingxuan Yang, Gang Shen, Zhe Xia, Yuntao Wang. "A verifiable and privacy-preserving cloud mining pool selection scheme in blockchain of things". *Information Sciences*, 623 (2023) 293-310 (2023)
- [5] Guoqiang Deng, Min Tang, Yuxing Xi, Mingwu Zhang*. "Privacy-preserving online medical prediagnosis training model based on soft-margin SVM". *IEEE Transaction on Service Computing*, 16(3): 2072-2084 (2023)
- [6] Biwen Chen, Tao Xiang, Guoli Xiao, Mingwu Zhang, Debiao He, Yan Zhang. "Efficient attribute-based signature with collusion resistance for Internet of vehicles". *IEEEE Transactions on Vehicular Technology*, 72(6): 7844-7856 (2023)
- [7] Hua Shen, Jiqiang Li, Ge Wu and Mingwu Zhang*, "Data release for machine learning via correlated differential privacy". *Information Processing & Management*, 60(3): 103349,2023
- [8] Mingwu Zhang, Mingxuan Yang, Gang Shen. "SSBAS-FA: A secure sealed-bid e-auction scheme with fair arbitration based on time-released blockchain". *Journal of System Architecture*. 129:102619 (2022)
- [9] Mingwu Zhang, Yu Chen and Jingkang Lin. "A privacy-preserving optimization of neighborhood-based recommendation for medical-aided diagnosis and treatment". *IEEE Internet of Things Journal*. 8(13): 10830-10842 (2021)
- [10] Hua Shen, Mingwu Zhang*, Jian Shen. "Efficient privacy-preserving cube-data aggregation scheme for smart grids". *IEEE Transaction on Information Forensics and Security*, 12(6):1369-1381 (2017)
- [11] Yanwei Zhou, Bo Yang, Zirui Qiao, Zhe Xia, Mingwu Zhang and Yi Mu. "Leakage-resilient identity-based cryptography from minimal assumption". *Des. Codes Cryptography*, 91, 3757-3801 (2023)
- [12] Mingwu Zhang, Shuo Huang, Gang Shen, Yuntao Wang. "PPNNP: A privacy-preserving neural network prediction with separated data providers ssing multi-client inner-product encryption". *Computer Standard and Interfaces*, 84:103678 (2023)
- [13] Xingxin Li, Youwen Zhu, Jian Wang, Zhe Liu, Yining Liu, Mingwu Zhang. "On the soundness and security of privacy-preserving SVM for outsourcing data classification". *IEEE Transactions on Dependable and Secure Computing (IEEE-TDSC)*, 15(5): 906-912, 2018
- [14] Run-Hua Shi, Bai Liu, Mingwu Zhang. Measurement-device-independent quantum secure multiparty summation. *Quantum Information Processing*. 21(4): 122 (2022)
- [15] Yanwei Zhou, Bo Yang, Zhe Xia, Mingwu Zhang, Yi Mu. "Novel generic construction of leakage-resilient PKE scheme with CCA security". *Des. Codes Cryptography*. 89(7): 1575-1614 (2021)
- [16] Mingwu Zhang, Yu Chen and Jingkang Lin. "A privacy-preserving optimization of neighborhood-based recommendation for medical-aided diagnosis and treatment". *IEEE Internet of Things Journal*. 8(13): 10830-10842 (2021)
- [17] Yanwei Zhou, Yuan Xua, Zirui Qiao, Bo Yang, Mingwu Zhang. "Continuous leakage-resilient certificate-based signeryption scheme and application in cloud computing". *Theoretical Computer Science*, 860: 1-22 (2021)
- [18] Mingwu Zhang, Yu Chen, Willy Susilo. "PPO-CPQ: A privacy-preserving optimization of clinical pathway query for e-healthcare systems". *IEEE Internet of Things Journal*, 7(10): 10660-10672 (2020)
- [19] Mingwu Zhang, Yan Jiang, Hua Shen, and Susilo Willy. "Cloud-based data-sharing scheme using verifiable and cca-secure re-encryption from indistinguishability obfuscation". *Inscrypt* '18, LNCS11449, pp240-259, Springer (2019)
- [20] Rongmao Chen, Yi Mu, Guomin Yang, Willy Susilo, Fuchun Guo, Mingwu Zhang. "Cryptographic reverse firewall via malleable smooth projective hash function". ASIACRYPT 2016, Part I, LNCS 10031, pp 844-876 (2016)