Resume of Hua SHEN

Basic Information

School :	School of Computer Science
Gender：	Female
Title：	Professor
Education：	Ph.D of Engineering
Tutor：	Doctor degree
Email:	cshshen@hbut.edu.cn
Interest of research:	Privacy Preservation, Information Security and Network Security

Academic Background

From September 1997 to July 2001, Hubei University of Technology, Bachelor's degree in Computer Networking and Communications;
From September 2005 to July 2007, Wuhan University, Master's degree of Computer Software and Theory;
From September 2007 to July 2014, Wuhan University, Doctor's degree of Computer Software and Theory.

Oversea visiting

2019/01-2020/01, Visiting scholar, University of Wollongong, Australia;

Representative Projects

[1] "Research on Privacy-Preserving Data Aggregation Technologies for Massive Data Analysis", National Natural Science Foundation of China (No. 61702168), 2018-2020, PI.
[2] "Research and Design of Privacy-Preserving Security Mechanism in Smart Grids", Hubei Provincial Department of Education (No. D20181402), 2018-2019, PI.
[3] "Construction of Performance Evaluation Platform of Service Composition for Cloud Manufacturing", Hubei Provincial Department of Education (No. Q20151402), 2015-2016, PI.
[4] "Research on Key Technologies of Provable Secure Program Obfuscation", National Natural Science Foundation of China (No. 61672010), 2017-2020, Collaborator.
[5] "Research on Primitive Representation and Extension Method of SDN Management Information", National Natural Science Foundation of China (No. 61602162), 2017-2019, Collaborator.
[6] "Research on Information Model Fusion Problem of SDN Network Management", National Natural Science Foundation of China (No. 61440024), 2015-2015, Collaborator.
[7] "Research on Key Management of Finance and Taxation Cloud Data Sharing

Group Based on Attribute Encryption", Hubei Provincial Department of Education (No. Q20151402), 2016-2018, Collaborator.

[8] "Research on Cooperative Computing of Anti-Leakage IoT Nodes", Hubei Provincial Department of Education (No. D20151401), 2015-2016, Collaborator.

Representative Articles

[1] **Hua Shen**, Ge Wu, Zhe Xia, Willy Susilo, and Mingwu Zhang. A Privacy-Preserving and Verifiable Statistical Analysis Scheme for an E-Commerce Platform [J]. IEEE Transactions on Information Forensics and Security, 2023, 18: 2637-2652. (SCI 1)

[2] **Hua Shen**, Mingwu Zhang, Jian Shen. Efficient Privacy-Preserving Cube-Data Aggregation Scheme for Smart Grids [J]. IEEE Transactions on Information Forensics & Security, 2017, 12(6):1369-1381. (SCI 1)

[3] **Hua Shen**, Ge Wu, Willy Susilo, and Mingwu Zhang. Data-Matching-Based Privacy-Preserving Statistics and Its Applications in Digital Publishing Industry [J]. IEEE Transactions on Services Computing, 2023. (SCI 2)

[4] **Hua Shen**, Jiqiang Li, Ge Wu, and Mingwu Zhang. Data Release for Machine Learning via Correlated Differential Privacy [J]. Information Processing and Management, May 2023, 60(3): 103349. (SCI 1)

[5] **Hua Shen**, Mingwu Zhang, Hao Wang, Fuchun Guo, and Willy Susilo. A cloud-aided privacy-preserving multi-dimensional data comparison protocol [J]. Information Sciences, 2021, 545: 739-752. (SCI 1)

[6] **Hua Shen**, Yajing Liu, Zhe Xia, and Mingwu Zhang*. An Efficient Aggregation Scheme Resisting on Malicious Data Mining Attacks for Smart Grid [J]. Information Sciences, 2020, 526: 289-300. (SCI 1)

[7] **Hua Shen**, Mingwu Zhang, Hao Wang, Fuchun Guo, and Willy Susilo. A lightweight privacy-preserving fair meeting location determination scheme [J]. IEEE Internet of Things Journal, 2020, 7(4):3038-3093. (SCI 1)

[8] **Hua Shen**, Mingwu Zhang, Hao Wang, Fuchun Guo, and Willy Susilo. Efficient and Privacy-Preserving Massive Data Processing for Smart Grids [J]. IEEE Access, 2021, vol. 9, pp. 70616-70627. (SCI 3)

[9] **SHEN Hua**, WANG Liqiong. Task Offloading Based on Mobile Edge Computing and Privacy-Preserving Issues: A Survey [J]. J Wuhan Univ (Nat Sci Ed), Apr. 2023, 69(2): 256-269. (in Chinese)

[10] **SHEN Hua**, LI Jiqiang, XIE Haitao, SHEN Gang, ZHANG Mingwu. Design and Experimental Analysis of Group Key Distribution Scheme with Forward Secrecy [J]. Nov. 2022, 41(11): 39-44. (in Chinese)

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Practical Security. ProvSec 2023. Lecture Notes in Computer Science, vol 14217: 385-403. Springer, Cham.

[13] **Hua Shen**, Daijie Sun, Lan Zhao, and Mingwu Zhang. A Fair (t, n)-threshold Secret Sharing Scheme with Efficient Cheater Identifying [C]. //In processing of IFIP International Conference on Trust Management (IFIPTM2019). Springer, Cham, 2019: 122-132.

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[16] **Hua Shen**, Yanxiang He, Mingwu Zhang. Performance Bottlenecks Location Scheme Based on Structural Features of Service Composition Model. Computer Science, 2015, 42(9): 107-117. (in Chinese)

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Model to Markov Chain. Journal of Chinese Computer System, 2014, 35(02): 339-342. (in Chinese)

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Authorized invention patents

[1] **Hua Shen**, Mingwu Zhang, et al.. A Privacy-Preserving Regional Meter Data Aggregation System and Method for Smart Grids. China invention patent, No. ZL2015 10210054.5.

[2] **Hua Shen**, Mingwu Zhang, et al.. A Resisting Malicious Data Mining Attack Data Aggregation System and Method for Smart Grids. China invention patent, No. ZL201610132478.9.

[3] **Hua Shen**, Mingwu Zhang, et al.. A Privacy-Preserving Multi-community Multi-dimensional Data Aggregation System and Method for Smart Grids. China invention patent, No. ZL201610165396.4.

[4] **Hua Shen**, Mingwu Zhang, et al.. A Lightweight Privacy-Preserving Optimal Meeting Location Determination Scheme. China invention patent, No. ZL201710004762.2.

[5] **Hua Shen**, Mingwu Zhang, et al.. A Privacy-Preserving Mulitfunctional Data Processing System and Method. China invention patent, No. ZL201710401628.2.

[6] **Hua Shen**, Mingwu Zhang, et al.. An Efficient and Privacy-Preserving Computation Method for Private Attribute Set Intersection. China invention patent, No. ZL201810635872.3.

[7] **Hua Shen**, Mingwu Zhang, et al.. A Privacy-Preserving Feature Attribute Processing Method and Device. China invention patent, No. ZL201810846780.X.

[8] **Hua Shen**, Mingwu Zhang, et al.. Privacy-Preserving Feature User Discovery and Statistical Method in Massive User Environments. China invention patent, No. zl201810819021.4. (Transferred)