Name: Xinyu Li Day of Birth: 1989.08 Education: PhD

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Research Interest: Applied Cryptography

Cryptographic protocols

- Provable security
- Blockchain Security

Working Experience

Post-doctoral Fellow, working with Prof. Man Ho Au

2020.12 — now
Department of Computer Science, The University of Hong Kong, Hong Kong

Education

PhD of Computer Science and Technology 2016.09 **—** 2020.09 University of Chinese Academy of Sciences, Beijing, China Advisor: Prof. Jing Xu Joint Master Program 2014.09 -2016.06 Institute of Software, Chinese Academy of Sciences, Beijing, China Advisor: Prof. Jing Xu and Prof. Zhenfeng Zhang Master of Electronic and Communication Engineering 2013.09 -2016.06 University of Science and Technology of China, Hefei, China Advisor: Prof. Dengguo Feng and Prof. Honggang Hu **Bachelor of Information Security** 2009.09 -2013.06

Articles

1. <u>Xinyu Li</u>, Jing Xu, Zhenfeng Zhang, Dengguo Feng: On the security of TLS resumption and renegotiation, *China Communications*, 2016, 13(12): 176--188.

University of Science and Technology of China, Hefei, China

Thesis advisor: Prof. Zhenfeng Zhang

2. <u>Xinyu Li</u>, Jing Xu, Zhenfeng Zhang, Dengguo Feng, Honggang Hu: Multiple handshakes security of TLS 1.3 candidates, *IEEE Symposium on Security and Privacy (S&P)*, 2016, 486–505. (Acceptance Rate: 13.8%)



- 3. Bingyong Guo, <u>Xinyu Li*</u>: Multi-valued Byzantine Consensus Scheme with High Transmission Efficiency, *Journal of Cryptologic Research*, 2018, 5(5): 516-528.
- 4. <u>Xinyu Li</u>, Jing Xu, Zhenfeng Zhang: Revisiting the Security of Qian et al.'s Revised Tree-LSHB+ Protocol. *Wireless Personal Communications*, 2019, 106(2):321–343.
- 5. <u>Xinyu Li</u>, Jing Xu, Zhenfeng Zhang, Xiao Lan, Yuchen Wang: Modular Security Analysis of OAuth 2.0 in the Three-Party Setting. *IEEE European Symposium on Security and Privacy (EuroS&P)*, 2020, 276--293. (Acceptance Rate: 14.5%)
- 6. <u>Xinyu Li</u>, Jing Xu, Xiong Fan, Yuchen Wang, Zhenfeng Zhang: Puncturable Signatures and Applications in Proof-of-Stake Blockchain Protocols. *IEEE Transactions on Information Forensics and Security (TIFS)*, 2020, 15:3872--3885.
- 7. <u>Xinyu Li</u>, Jing Xu, Lingyuan Yin, Yuan Lu, Qiang Tang, Zhenfeng Zhang: Escaping from Consensus: Instantly Redactable Blockchain Protocols in Permissionless Setting. *IEEE Transactions on Dependable and Secure Computing (TDSC)*, 2022.
- 8. Lixin Liu, Xinyu Li, Man Ho Au, Zhuoya Fan, Xiaofeng Meng: Metadata Privacy Preservation for Blockchain-Based Healthcare Systems. *International Conference on Database Systems for Advanced Applications (DASFAA)*, 2022, 404–412. (Acceptance Rate: 27.3%)
- 9. Chengru Zhang, Xinyu Li* (corresponding author), Man Ho Au: ePoSt: Practical and Client-friendly Proof of Storage-Time. *IEEE Transactions on Information Forensics and Security (TIFS)*, 2022.
- 10. Xinyu Li, Jing Xu, Man Ho Au, Chengru Zhang: General design of (tag-based) puncturable signature and its application. (Manuscript)

Honors and Awards

"New academic star", InForSec, Tsinghua University, 2016.

Patents

1. A puncturable signature scheme

Jing Xu, <u>Xinyu Li</u> and Zhenfeng Zhang

Patent number: ZL 201910279881.8, CN.

2. Tag based puncturable signature and its application in PoS blockchain protocols

Jing Xu, Xinyu Li, Zhenfeng Zhang and Xinlei Zhai

Patent number: ZL 201910917779.6, CN

Academic Service

- Conference Review: FC (2017), ACM CCS (2019), ASIACRYPT (2020), ESORICS (2020), ACM ASIACCS (2020,2021,2022), ACNS(2021), CT-RSA(2022).
- Journal Review: TSC (2018), TMC (2019), TDSC(2021), JISAS(2021,2022).