

Zecheng Li

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PERSONAL STATEMENT	My research interests are in blockchain security, smart contract security, and trusted execution environment (TEE). I am also interested in applying blockchain techniques to broader areas. I have experience with teaching undergraduate students and graduate students. I was the lecturer for big data computing course and teaching assistant for blockchain-related courses.	
WORKING EXPERIENCE	Research Assistant Professor The Hong Kong Polytechnic University, Department of Computing	Dec. 2022 - present
EDUCATION	Ph.D. The Hong Kong Polytechnic University , Department of Computing Supervised by Prof. Bin Xiao (IEEE Fellow)	Sep. 2017 - Nov. 2022
	B.Eng. Southeast University , School of Information Science and Engineering	Sep. 2013 - Jun. 2017
PUBLICATIONS	<ul style="list-style-type: none">[1] Jianhuan Wang , Jichen Li, Zecheng Li, Xiaotie Deng and Bin Xiao, “n-MVTL Attack: Optimal Transaction Reordering Attack on DeFi”, <i>European Symposium on Research in Computer Security (ESORICS)</i>, The Hague, The Netherlands, Sep, 2023.[2] Haotian Wu, Zecheng Li, Rui Song, Bin Xiao, “Enabling Privacy-Preserving and Efficient Authenticated Graph Queries on Blockchain-Assisted Clouds”, <i>IEEE Transactions on Knowledge and Data Engineering (TKDE)</i>, 2023.[3] Zecheng Li, Bin Xiao, Songtao Guo, and Yuanyuan Yang, “Securing Deployed Smart Contracts and DeFi with Distributed TEE Cluster”, <i>IEEE Transactions on Parallel and Distributed System (TPDS)</i>, vol. 34, issue. 3, pp. 828–842, Mar, 2023.[4] Zecheng Li, Shengyuan Chen, Hongshu Dai, Dunyuan Xu, Chengkang Chu, and Bin Xiao, “Abnormal Traffic Detection: Traffic Feature Extraction and DAE-GAN with Efficient Data Augmentation”, <i>IEEE Transactions on Reliability (TR)</i>, vol. 72, issue. 2, pp. 498–510, Jun 2023.[5] Zecheng Li, Yu Zhou, Songtao Guo, and Bin Xiao, “SolSaviour: A Defending Framework for Deployed Defective Smart Contracts”, in <i>Annual Computer Security Applications Conference (ACSAC)</i>, Virtual, pp. 748–760, Nov, 2021.[6] Zecheng Li, Haotian Wu, Lap Hou Lao, Songtao Guo, Yuanyuan Yang, and Bin Xiao, “PISTIS: Issuing Trusted and Authorized Certificates With Distributed Ledger and TEE”, <i>IEEE Transactions on Parallel and Distributed Systems (TPDS)</i>, vol. 33, issue. 7, pp. 1636–1649, Oct, 2021.[7] Zecheng Li, Shang Gao, Zhe Peng, Songtao Guo, Yuanyuan Yang, and Bin Xiao, “B-DNS: A Secure and Efficient DNS Based on the Blockchain Technology”, <i>IEEE Transactions on Network Science and Engineering (TNSE)</i>, vol. 8, issue. 2, pp. 1674–1686, Mar, 2021.[8] Laphou Lao, Zecheng Li, Songlin Hou, Bin Xiao, Songtao Guo, and Yuanyuan Yang, “A Survey of IoT Applications in Blockchain Systems: Architecture, Consensus, and Traffic Modeling”, <i>ACM Computing Surveys (CSUR)</i>, vol. 53, no. 1, pp. 1–32, Feb, 2020.[9] Shang Gao, Zecheng Li, Zhe Peng, and Bin Xiao, “Power Adjusting and Bribery Racing: Novel Mining Attacks in the Bitcoin System”, in <i>Proceedings of the 2019 ACM SIGSAC Conference on Computer and Communications Security (CCS)</i>, London, UK, Nov, 2019.[10] Shang Gao, Zecheng Li, Yuan Yao, Bin Xiao, Songtao Guo, and Yuanyuan Yang, “Software-defined firewall: Enabling malware traffic detection and programmable security control”, in <i>Proceedings of the 2018 Asia Conference on Computer and Communications Security (ASIACCS)</i>, Songdo, Incheon, Korea, Jun, 2018.	

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- [13] **Zecheng Li**, Li Liao, Hareton Leung, Bixin Li, and Chao Li, “Evaluating the credibility of cloud services”, *Computers & Electrical Engineering*, vol. 58, no. 4, pp. 161–175, Feb, 2017.

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SERVICE	<p>Referee for Journals: IEEE Transactions on Dependable and Secure Computing IEEE Transactions on Cloud Computing IEEE Transactions on Reliability IEEE Transactions on Network and Service Management Journal of Parallel and Distributed Computing</p>
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TEACHING EXPERIENCE	<p>Lecturer at PolyU COMP5434 Big Data Computing</p> <p>Lecturer at PolyU COMP5434 Big Data Computing</p>	<p>Semester 3, 2023/24</p> <p>Semester 3, 2022/23</p>
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