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Employment History

2020.04 –	🔖	**Research Assistant Professor**
		Department of Computing, The Hong Kong Polytechnic University.
2017.12 – 2020.03	🔖	**Postdoc Research Fellow**
		Department of Computing, The Hong Kong Polytechnic University.

Education

2013.07 – 2017.10	🔖	**Ph.D.** in Computer Science, The Hong Kong Polytechnic University.
2010.06 – 2013.04	🔖	**M.S.** in Information Security, Nanjing University of Posts and Telecommunications.
2006.09 – 2010.06	🔖	**B.S.** in Information Security, Nanjing University of Posts and Telecommunications.

Research Publications

1 Pengfei Jing, Qiyi Tang, Yuefeng Du, **Lei Xue**, Xiapu Luo, Ting Wang, Sen Nie, and Shi Wu, "Adversarial Attacks on Lane Detection in Autonomous Driving," in Proc. of the 30th USENIX Security Symposium (USENIX Security), 2021. *(CCF-A, Top-4 security conference)*

2 Hao Zhou, Haoyu Wang, Yajin Zhou, Xiapu Luo, Yutian Tang, **Lei Xue**, and Ting Wang, "Demystifying Diehard Android Apps," in Proc. of the 35th IEEE/ACM International Conference on Automated Software Engineering (ASE), 2020. *(CCF-A, Top-3 software engineering conference)*

3 JiaLi Wei, Ming Fan, Xi Xu, Ang Jia, Zhou Xu, and **Lei Xue**, "Interpretation Area-Guided Detection of Adversarial Samples," in Proc. of IEEE 20th International Conference on Software Quality, Reliability and Security Companion (QRS-C), 2020.

4 **Lei Xue**, Hao Zhou, Xiapu Luo, Le Yu, Dinghao Wu, Yajin Zhou, and Xiaobo Ma, "PackerGrind: An Adaptive Unpacking System for Android Apps," IEEE Transactions on Software Engineering (TSE), 2020. *(CCF-A, JCR-Q1)*

5 Qiao Kang*, **Lei Xue***, Adam Morrison*, Yuxin Tang, Ang Chen, and Xiapu Luo "Programmable In-Network Security for Context-aware BYOD Policies," in Proc. of the 29th USENIX Security Symposium (USENIX Security), 2020. (*Equal contribution). *(CCF-A, Top-4 security conference)*

6 Xiaobo Ma, Jiahao Peng, **Lei Xue**, and Xiaohong Guan, "Integrated security of cyber-physical vehicle networked systems in the age of 5G ," SCIENTIA SINICA Informationis (SSI), 2019. *(CCF-A Chinese Journal)*

7 Xiaobo Ma, Bo An, Mengchen Zhao, Xiapu Luo, **Lei Xue**, Zhenhua Li, TungNgai Miu, and Xiaohong Guan, "Randomized Security Patrolling for Link Flooding Attack Detection ," IEEE Transactions on Dependable and Secure Computing (TDSC), 2019. *(CCF-A, JCR-Q1)*

8 **Lei Xue**, Chenxiong Qian, Hao Zhou, Xiapu Luo, Yajin Zhou, Yuru Shao, and Alvin T.S. Chan, "NDroid: Towards Tracking Information Flows across Multiple Android Contexts," IEEE Transactions on Information Forensics and Security (TIFS), 2019. *(CCF-A, JCR-Q1)*

9 Jiahao Peng, Xiaobo Ma, Jianfeng Li, **Lei Xue**, and Wenjun Hu, "Shoot at A Pigeon And Kill A Crow: On Strike Precision of Link Flooding Attacks," in Proc. of 12th International Conference on Network and System Security (NSS), 2018.

10 Ting Chen, Wanyu Huang, Muhui Jiang, Xiapu Luo, **Lei Xue**, Ying Wang, and Xiaosong Zhang, "PERDICE: Towards Discovering Software Inefficiencies Leading to Cache Misses and Branch Mispredictions," in Proc. of 42nd Annual Computer Software and Applications Conference (COMPSAC), 2018. *(CCF-C)*

11 Adam Morrison*, **Lei Xue***, Ang Chen, and Xiapu Luo, "Enforcing Context-Aware BYOD Policies with In-Network Security," in Proc. of USENIX Workshop on Hot Topics in Cloud Computing (HotCloud), 2018. (* Equal contribution)

12 **Lei Xue**, Xiaobo Ma, Xiapu Luo, Edmond W.W. Chan, Tony T.N. Miu, and Guofei Gu, "LinkScope: Towards Detecting Target Link Flooding Attacks," IEEE Transactions on Information Forensics and Security (TIFS), 2018. *(CCF-A, JCR-Q1)*

13 **Lei Xue**, Yajin Zhou, Ting Chen, Xiapu Luo, and Guofei Gu,"Malton: Towards On-Device Non-Invasive Mobile Malware Analysis for ART ," in Proc. of the 26th USENIX Security Symposium (USENIX Security), 2017. *(CCF-A, Top-4 security conference)*

14 **Lei Xue**, Xiapu Luo, Le Yu, Shuai Wang, and Dinghao Wu, "Adaptive Unpacking of Android Apps," in Proc. of 39th International Conference on Software Engineering (ICSE), 2017. *(CCF-A, Top-3 software engineering conference)*

15 **Lei Xue**, Xiaobo Ma, Xiapu Luo, Le Yu, Shuai Wang, and Ting Chen, "Is What You Measure What You Expect? Factors Affecting Smartphone-Based Mobile Network Measurement," in Proc. of IEEE International Conference on Computer Communications (INFOCOM), 2017. *(CCF-A, Computer network conference)*

16 Le Yu, Tao Zhang, Xiapu Luo, **Lei Xue**, and Henry Chang, "Towards Automatically Generating Privacy Policy for Android Apps," IEEE Transactions on Information Forensics and Security (TIFS), 2017. *(CCF-A, JCR-Q1)*

17 Xiapu Luo, Haochen Zhou, Le Yu, **Lei Xue**, and Yi Xie, "Characterizing mobile *-box applications," Computer Networks (Computer Networks), 2016. *(CCF-B)*

18 Le Yu,Tao Zhang, Xiapu Luo, and **Lei Xue**, "AutoPPG: Towards Automatic Generation of Privacy Policy for Android Applications ," in Proc. of 6th Annual ACM CCS Workshop on Security and Privacy in Smartphones and Mobile Devices (SPSM), 2015.

19 **Lei Xue**, Chenxiong Qian, and Xiapu Luo, "AndroidPerf: A Cross-layer Dynamic Profiling System for Android," in Proc. of IEEE/ACM International Symposium on Quality of Service (IWQoS), 2015. *(CCF-B)*

20 **Lei Xue**, and Guozi Sun, "Design and Implementation of A Malware Detection System Based on Network Behavior," Security and Communication Networks (SCN), 2015. *(CCF-C)*

21 **Lei Xue**, Xiapu Luo, Edmond W. W. Chan, and Xian Zhan, "Towards Detecting Target Link Flooding Attack," in Proc. of 28th USENIX Large Installation System Administration Conference (LISA), 2014. *(CCF-B)*

22 Xiapu Luo, **Lei Xue**, Cong Shi, Yuru Shao, Chenxiong Qian, and Edmond W. W. Chan, "On Measuring One-Way Path Metrics from a Web Serve," in Proc. of IEEE International Conference on Network Protocols (ICNP), 2014. *(CCF-B)*

23 **Lei Xue**, Xiapu Luo, and Yuru Shao, "kTRxer: A portable toolkit for reliable internet probing," in Proc. of IEEE/ACM International Symposium on Quality of Service (IWQoS), 2014. *(CCF-B)*

24 **Lei Xue**, Ricky K. P. Mok, and Rocky K. C. Chang, "OMware: an open measurement ware for stable residential broadband measurement (poster)," in Proc. of Proceedings of ACM Special Interest Group on Data Communication (SIGCOMM), 2013.

Funds

Professional Services

TPC Member

- 2018: NSS

- 2019: SocialSec | SANER Blockchain Workshop | CoNEXT Student Workshop

- 2020: SocialSec | NSS

- 2021: SANER IBF Workshop |

Journal Reviewer (Selected)

- IEEE Transactions on Dependable and Secure Computing (TDSC)

- IEEE Transactions on Information Forensics and Security (TIFS)

- IEEE Transactions on Mobile Computing (TMC)

- ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)

- IEEE Communication Magazine

- Security and Communication Networks

Teaching

- Big Data Computing (COMP5434), Summer 2020, Lecturer

- Computer Communications Networks (COMP312), Spring 2016, TA

- Distributed Computing (COMP5325), Spring 2015, TA

- Internet Security: Principles and Practice (COMP5353), Spring 2014, Spring 2015, TA

- Web Services and Project Development (COMP5332), Fall 2013, Fall 2014, TA