

# Chaoyi Lu

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## EDUCATION

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### 2017 – Present: Tsinghua University

PhD candidate, Institute for Network Sciences and Cyberspace

Advisors: Prof. Haixin Duan and Prof. Jianping Wu

Research Areas: Network security, Internet measurement

### 2013 – 2017: Beijing University of Posts and Telecommunications

B.Eng. in Information Security, School of Cyberspace Security

Excellent Undergraduate Award, Beijing Municipal Commission of Education

## PUBLICATIONS

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### Conference Papers

- [9] [\[NDSS '21\]](#) [Chaoyi Lu](#), Baojun Liu, Yiming Zhang, Zhou Li, Fenglu Zhang, Haixin Duan, Ying Liu, Joann Qiongna Chen, Jinjin Liang, Zaifeng Zhang, Shuang Hao and Min Yang. **From WHOIS to WHOWAS: A Large-Scale Measurement Study of Domain Registration Privacy under the GDPR**. In Proceedings of the Network and Distributed System Security Symposium 2021, Virtual event, February 2021.
- [8] [\[USENIX Security '21\]](#) Kaiwen Shen, Chuhan Wang, Xiaofeng Zheng, Minglei Guo, [Chaoyi Lu](#), Baojun Liu, Yuxuan Zhao, Shuang Hao, Haixin Duan, Qingfeng Pan and Min Yang. **Weak Links in Authentication Chains: A Large-scale Analysis of Email Sender Spoofing Attacks**. To appear in the 30th USENIX Security Symposium, Vancouver, BC, Canada, August 2021.
- [7] [\[CCS '20\]](#) Mingming Zhang, Xiaofeng Zheng, Kaiwen Shen, Ziqiao Kong, [Chaoyi Lu](#), Yu Wang, Haixin Duan, Shuang Hao, Baojun Liu and Min Yang. **Talking with Familiar Strangers: An Empirical Study on HTTPS Context Confusion Attacks**. In Proceedings of the 27th ACM Conference on Computer and Communications Security, Virtual event, November 2020.
- [6] [\[CCS '20\]](#) Yiming Zhang, Baojun Liu, [Chaoyi Lu](#), Zhou Li, Haixin Duan, Shuang Hao, Mingxuan Liu, Ying Liu, Dong Wang and Qiang Li. **Lies in the Air: Characterizing Fake-base-station Spam Ecosystem in China**. In Proceedings of the 27th ACM Conference on Computer and Communications Security, Virtual event, November 2020.
- [5] [\[USENIX Security '20\]](#) Xiaofeng Zheng, [Chaoyi Lu](#), Jian Peng, Qiushi Yang, Dongjie Zhou, Baojun Liu, Keyu Man, Shuang Hao, Haixin Duan and Zhiyun Qian. **Poison Over Troubled Forwarders: A Cache Poisoning Attack Targeting DNS Forwarding Devices**. In Proceedings of the 29th USENIX Security Symposium, Virtual event, August 2020.
- [4] [\[IMC '19\]](#) [Chaoyi Lu](#), Baojun Liu, Zhou Li, Shuang Hao, Haixin Duan, Mingming Zhang, Chunying Leng, Ying Liu, Zaifeng Zhang and Jianping Wu. **An End-to-End, Large-Scale Measurement of DNS-over-Encryption: How Far Have We Come?**. In Proceedings of the Internet Measurement Conference, Amsterdam, Netherlands, October 2019.
  - [Winner of IRTF Applied Networking Research Prize \(ANRP\) 2020](#)
  - [Nominee of Distinguished Paper Award & Community Contribution Award](#)

- [3] [\[EuroS&P '19\]](#) Baojun Liu, Zhou Li, Peiyuan Zong, [Chaoyi Lu](#), Haixin Duan, Ying Liu, Sumayah Alrwais, Xiaofeng Wang, Shuang Hao, Yaoqi Jia, Yiming Zhang, Kai Chen and Zaifeng Zhang. **TrafficStop: Detecting and Measuring Illicit Traffic Monetization Through Large-scale DNS Analysis**. In Proceedings of the 4th IEEE European Symposium on Security and Privacy, Stockholm, Sweden, June 2019.
- [2] [\[USENIX Security '18\]](#) Baojun Liu, [Chaoyi Lu](#), Haixin Duan, Ying Liu, Zhou Li, Shuang Hao and Min Yang. **Who Is Answering My Queries: Understanding and Characterizing Interception of the DNS Resolution Path**. In Proceedings of the 27th USENIX Security Symposium, Baltimore, MD, USA, August 2018.
- [1] [\[DSN '18\]](#) Baojun Liu, [Chaoyi Lu](#), Zhou Li, Ying Liu, Haixin Duan, Shuang Hao and Zaifeng Zhang. **A Reexamination of Internationalized Domain Names: the Good, the Bad and the Ugly**. In Proceedings of the 48th IEEE/IFIP International Conference on Dependable Systems and Networks, Luxembourg City, Luxembourg, June 2018.

## Workshop Paper

- [1] [\[FOCI '18\]](#) Mingming Zhang, Baojun Liu, [Chaoyi Lu](#), Jia Zhang, Shuang Hao and Haixin Duan. **Measuring Privacy Threats in China-Wide Mobile Networks**. 8th USENIX Workshop on Free and Open Communications on the Internet, Baltimore, MD, USA, August 2018.

## Community and Industrial Conferences

- [2] **An End-to-End, Large-Scale Measurement of DNS-over-Encryption: How Far Have We Come?**  
[\[IETF 108\]](#) IRTF Open Meeting, IETF 108 Online, July 2020.  
[\[OARC 31\]](#) DNS-OARC Workshop, Austin, TX, USA, October 2019.
- [1] **Who Is Answering My Queries: Understanding and Characterizing Interception of the DNS Resolution Path**  
[\[ANRW '19\]](#) Applied Networking Research Workshop, Montreal, Quebec, Canada, July 2019.  
[\[OARC 30\]](#) DNS-OARC Workshop, Bangkok, Thailand, May 2019.

## EXTERNAL REVIEWERS

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ICDCS '21, NDSS '20, DSN '20, CCS '19, ESORICS '19, ICICS '19, IoT S&P '18, RESEC '18  
 IEEE TNSM 2020

## AWARDS

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### Academia

IRTF Applied Networking Research Prize (ANRP) (2020)  
 IMC Nominee of Distinguished Paper Award & Community Contribution Award (2019)  
 DSN Student Travel Grant (2018)

### Scholarships, Contests & Others

1st Class Scholarship of Tsinghua University (2020)  
 Cyber Security Scholarship of China Internet Development Foundation (2016)  
 Scholarship of Beijing University of Posts and Telecommunications (2014, 2015, 2016)  
 1st Prize, The 5<sup>th</sup> Competition of Next Generation Internet Technology Innovation (2019)  
 Bronze, CCF Collegiate Computer Systems & Programming Contest (2016)  
 2nd Prize, National College Student Information Security Contest (2016)  
 Honorable Mention, The Mathematical Contest in Modeling (2016)  
 Excellent Undergraduate Award, Beijing Municipal Commission of Education (2017)