

# 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] [\[INDSS '21\]](#) **Chaoyi Lu**, Baojun Liu, Yiming Zhang, Zhou Li, Fenglu Zhang, Haixin Duan, Ying Liu, Joann 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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NDSS 2020, DSN 2020, CCS 2019, ESORICS 2019, ICICS 2019, IoT S&P 2018, RESEC 2018  
 IEEE TNSM 2020

## AWARDS

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### Academia

IRTF Applied Networking Research Prize (ANRP) (2020)  
 DSN Student Travel Grant (2018)

### Scholarships, Contests & Others

1st Class Scholarship of Tsinghua University (2020)  
 Cyber Security Scholarship, 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)