# 陆超逸 Chaoyi Lu

清华大学 网络科学与网络空间研究院 博士后 北京市海淀区清华大学 FIT 楼 4-204 室 luchaoyi@tsinghua.edu.cn ● https://chaoyi.lu

# 工作教育经历 Education & Employment

2022 年至今: 清华大学, 博士后

合作导师: 段海新教授

研究方向: 互联网测量、网络安全

2017 至 2022 年: 清华大学, 工学博士

导师: 吴建平 教授

学位论文:《互联网域名体系安全技术测量研究》

获 2022 年清华大学优秀博士毕业生、清华大学优秀博士学位论文

获 2022 年北京市普通高等学校优秀毕业生

2013 至 2017 年:北京邮电大学,工学学士

### 学术成果 Publications

- ◇ 共发表会议论文 18 篇(13 篇发表于领域 A 类国际学术会议)、牵头起草通信行业标准 1 项
- ◇ 研究主题: 域名系统测量分析 [1-2, 6, 8, 13-16]、域名安全威胁 [3-5, 12]、其他 [7, 9-11]
- ◇ 获奖情况: 国际互联网研究任务组应用网络研究奖 [13]、ACM CCS 杰出论文奖 [4]
- ◇ 互联网社区会议报告: ICANN APAC DNS Forum, IETF, BlackHat EU, IDS, DNS-OARC, ANRW

#### 会议论文 Conference Papers

- [1] [WWW '24] R. Li, B. Liu, Chaoyi Lu, H. Duan, J. Shao. A Worldwide View on the Reachability of Encrypted DNS Services. To appear in Proceedings of the 36th Web Conference, May 2024.
- [2] [NDSS '24] M. Liu, Y. Zhang, X. Li, Chaoyi Lu, B. Liu, et al. *Understanding the Implementation and Security Implications of Protective DNS Services.* In Proceedings of the 31st Network and Distributed System Security Symposium, February 2024.
- [3] [CCS '23a] W. Xu, X. Li, Chaoyi Lu, B. Liu, J. Zhang, et al. *TsuKing: Coordinating DNS Resolvers and Queries into Potent DoS Amplifiers*. In Proceedings of the 30th ACM Conference on Computer and Communications Security, November 2023.
  - ◇ 互联网社区会议报告: Black Hat Europe 2023、DNS-OARC 41
- [4] [CCS '23b] F. Zhang, B. Liu, E. Alowaisheq, J. Chen, Chaoyi Lu, et al. Silence is not Golden: Disrupting the Load Balancing of Authoritative DNS Servers. In Proceedings of the 30th ACM Conference on Computer and Communications Security, November 2023.
  - ◇ ACM CCS 杰出论文奖 (Distinguished Paper Award) 获奖论文 (比例: 17/234)
  - ◇ 互联网社区会议报告: DNS-OARC 41、ICANN APAC DNS Forum 2023
- [5] [USENIX Sec '23] X. Li, Chaoyi Lu, B. Liu, Q. Zhang, Z. Li, et al. *The Maginot Line: Attacking the Boundary of DNS Caching Protection.* In Proceedings of the 32nd USENIX Security Symposium, Anaheim, CA, USA, August 2023.

- [6] [PAM '22] F. Zhang, Chaoyi Lu, B. Liu, H. Duan, Y. Liu. Measuring the Practical Effect of DNS Root Server Instances: A China-Wide Case Study. In Proceedings of the 23rd Passive and Active Measurement Conference. March 2022.
  - ◇ 互联网社区会议报告: ICANN APAC DNS Forum 2022
- [7] [CCS '21] Y. Zhang, B. Liu, Chaoyi Lu, Z. Li, H. Duan, et al. *Rusted Anchors: A National Client-Side View of Hidden Root CAs in the Web PKI Ecosystem.* In Proceedings of the 28th ACM Conference on Computer and Communications Security, November 2021.
- [8] [NDSS '21] Chaoyi Lu, B. Liu, Y. Zhang, Z. Li, F. Zhang, et al. *From WHOIS to WHOWAS: A Large-Scale Measurement Study of Domain Registration Privacy under the GDPR*. In Proceedings of the 28th Network and Distributed System Security Symposium, February 2021.
- [9] [USENIX Sec '21] K. Shen, C. Wang, X. Zheng, M. Guo, Chaoyi Lu, et al. Weak Links in Authentication Chains: A Large-scale Analysis of Email Sender Spoofing Attacks. In Proceedings of the 30th USENIX Security Symposium, August 2021.
- [10] [CCS '20a] M. Zhang, X. Zheng, K. Shen, Z. Kong, Chaoyi Lu, et al. *Talking with Familiar Strangers: An Empirical Study on HTTPS Context Confusion Attacks.* In Proceedings of the 27th ACM Conference on Computer and Communications Security, November 2020.
- [11] [CCS '20b] Y. Zhang, B. Liu, Chaoyi Lu, Z. Li, H. Duan, et al. *Lies in the Air: Characterizing Fake-base-station Spam Ecosystem in China.* In Proceedings of the 27th ACM Conference on Computer and Communications Security, November 2020.
- [12] [USENIX Sec '20] X. Zheng, Chaoyi Lu, J. Peng, Q. Yang, D. Zhou, et al. *Poison Over Troubled Forwarders: A Cache Poisoning Attack Targeting DNS Forwarding Devices.* In Proceedings of the 29th USENIX Security Symposium, August 2020.
  - ◇ 互联网社区会议报告: ICANN DNS Symposium 2021
- [13] [IMC '19] Chaoyi Lu, B. Liu, Z. Li, S. Hao, H. Duan, et al. *An End-to-End, Large-Scale Measurement of DNS-over-Encryption: How Far Have We Come?*. In Proceedings of the 19th Internet Measurement Conference, October 2019.
  - ◇ 国际互联网研究任务组应用网络研究奖(IRTF ANRP)获奖论文
  - ◇ IMC 会议最佳论文奖提名论文(比例: 3/39)和社区贡献奖提名论文(比例: 2/39)
  - ◇ 互联网社区会议报告: IETF 108、DNS-OARC 31
- [14] [EuroS&P '19] B. Liu, Z. Li, P. Zong, Chaoyi Lu, H. Duan, et al. *TraffickStop: Detecting and Measuring Illicit Traffic Monetization Through Large-scale DNS Analysis*. In Proceedings of the 4th IEEE European Symposium on Security and Privacy, June 2019.
- [15] [USENIX Sec '18] B. Liu, Chaoyi Lu, H. Duan, Y. Liu, Z. Li, et al. Who Is Answering My Queries: Understanding and Characterizing Interception of the DNS Resolution Path. In Proceedings of the 27th USENIX Security Symposium, August 2018.
  - ◇ 互联网社区会议报告: ACM/IRTF ANRW '19、DNS-OARC 30
- [16] [DSN '18] B. Liu, Chaoyi Lu, Z. Li, Y. Liu, H. Duan, et al. 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, June 2018.
- [17] [EthiCS Workshop '22] Y. Zhang, M. Liu, M. Zhang, Chaoyi Lu, H. Duan. *Ethics in Security Research: Visions, Reality, and Paths Forward.* Accepted to the 1st International Workshop on Ethics in Computer Security. June 2022.
  - ◇ 最佳学生论文奖 (Best Student Paper) 获奖论文 (比例: 1/5)

[18] [FOCI Workshop '18] M. Zhang, B. Liu, Chaoyi Lu, J. Zhang, S. Hao, et al. *Measuring Privacy Threats in China-Wide Mobile Networks*. Accepted to the 8th USENIX Workshop on Free and Open Communications on the Internet, August 2018.

#### 标准专利 Standards & Patents

[19] **陆超逸**, 黄友俊, 张甲, 段海新, 马迪等. **域名系统解析数据加密传输技术要求**. 中华人民共和国通信行业标准(项目号: 2020–1877T–YD, 报批稿于 2024 年由工业和信息化部公示)

## 课程讲座 Teaching

### 清华大学本研课程

2023 年秋	互联网络测量与安全分析 (研究生专业课)	专题讲座
2023年夏	网络安全攻防实践(本科生实验课程)	联合主讲
2020 年秋	互联网体系结构及其安全基础 (研究生专业课)	专题讲座
2020 年秋	网络空间安全基础与前沿(研究生专业基础课)	助教
2019 年秋	计算机网络原理(本科生专业基础课)	助教
2019 年春	计算机网络安全技术(研究生专业课)	助教

#### 其他课程和讲座

2023年	中国教育网(CERNET)DNS 安全技术培训会	主讲
2022 和 2023 年	DataCon 特训夏令营 - 互联网域名系统安全专题	主讲

## 学术和社区服务 Services & Activities

## 互联网社区会议

2023 年 ICANN 亚太地区互联网域名系统论坛 分论坛组织者、主持人

### 学术会议、期刊审稿

审稿委员会成员: SecureComm '23

外部审稿人: RAID '23, NDSS '22/'20, ICDCS '21, DSN '20, CCS '19, ESORICS '19, ICICS '19

期刊外部审稿: IEEE TNSM 2020、软件学报

## 奖励荣誉 Awards

2023年	ACM CCS 会议杰出论文奖
2022年	北京市普通高等学校优秀毕业生
2022年	清华大学优秀博士毕业生、清华大学优秀博士学位论文
2020年	国际互联网研究任务组应用网络研究奖(IRTF ANRP)
2020 和 2021年	清华大学研究生综合一等奖学金
2019 年	ACM IMC 会议最佳论文奖提名、社区贡献奖提名
2019年	第五届下一代互联网技术创新大赛甲组一等奖
2018年	IEEE/IFIP DSN 会议学生奖励金(Student Grant)
2016年	中国互联网发展基金会网络安全奖学金