

Mohammad Taha Khan

Contact Information	Department of Computer Science University of Illinois at Chicago Room 1120 SEO (M/C 152), Chicago, IL 60607	Email: tahakhan5@gmail.com Phone: +1 (631) 790 9553 Web: https://tahakhan.net
Research Interests	Internet Security & Privacy; Usable Security; Internet Freedom; Human-Computer Interaction	
Education	Ph.D. in Computer Science University of Illinois at Chicago, IL <ul style="list-style-type: none">Adviser: Chris KanichThesis: Enabling Longitudinal Privacy and Management of Data in Online ArchivesThesis Committee: Ajay Kshemkalyani (UIC); Blase Ur (U Chicago); Chris Kanich (UIC); Narseo Rodriguez (IMDEA/ICSI); Robert Sloan (UIC)Expected Graduation: Spring 2020; GPA: 4.0/4.0	Jan 2015 - Present
	Bachelor of Science in Electrical Engineering Lahore University of Management Sciences, Lahore, Pakistan <ul style="list-style-type: none">Thesis: An Experimental Platform for a Cooperative Communication NetworkGraduated with High Merit; GPA: 3.5/4.0	Aug 2009 - Jun 2013
Professional Experience	Ph.D. Student University of Illinois at Chicago, Chicago, IL	Jan 2015 - Present
	Graduate Research Intern Strategy and Analytics Division, Verisign Labs, Reston, VA	Jun 2019 - Aug 2019
	Research Intern International Computer Science Institute (ICSI), Berkeley, CA	Jun 2017 - Dec 2017
	Summer Research Intern NEC Labs America, Princeton, NJ	May 2016 - Aug 2016
	Research Assistant Lahore University of Management Sciences, Lahore, Pakistan	Jul 2013 - May 2014
Publications	<p>[1] Moving Beyond Set-It-And-Forget-It Privacy Settings on Social Media Mainack Mondal, Günce Su Yilmaz, Noah Hirsch, Mohammad Taha Khan, Michael Tang Christopher Tran, Chris Kanich, Elena Zheleva and Blase Ur. In <i>Proceedings of the 26th ACM Conference on Computer and Communications Security (CCS '19)</i>, London UK, November 2019</p> <p>[2] An Empirical Analysis of the Commercial VPN Ecosystem Mohammad Taha Khan, Joe DeBlasio, Geoff Voelker, Alex Snoeren, Chris Kanich and Narseo Rodriguez. In <i>Proceedings of the ACM SIGCOMM Internet Measurement Conference (IMC '18)</i>, Boston, MA, November 2018</p>	

- [3] **Making Retrospective Data Management Usable (Poster)**
Noah Hirsch, Chris Kanich, **Mohammad Taha Khan**, Xuefeng Liu, Mainack Mondal, Michael Tang, Christopher Tran, Blase Ur, William Wang, Günce Su Yilmaz and Elena Zheleva. In *Proceedings of the 14th Symposium On Usable Privacy and Security (SOUPS '18)*, Baltimore, MD, August 2018
- [4] **Identifying the Need for Longitudinal Data Management in Cloud Storage**
Mohammad Taha Khan, Maria Hyun, Chris Kanich and Blase Ur. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 18)*. Montreal, QC, Canada, April 2018
- [5] **Old is Still Gold: A Comparison of Cyber and Regular Fraud in the United States**
Mohammad Taha Khan and Chris Kanich. In *Proceedings of the 38th IEEE Symposium on Security and Privacy Workshop on Technology and Consumer Protection (ConPro '17)*, San Jose, CA, May 2017
- [6] **Sneak Peek: High Speed Covert Channels in Data-Center Networks**
Rashid Tahir, **Mohammad Taha Khan**, Xun Gong, Adnan Ahmed, Amiremad Ghassami, Hasanat Kazmi, Matthew Caesar, Negar Kiyawash and Fareed Zaffar. In *Proceedings of the IEEE Conference on Computer Communications (INFOCOM '16)*, San Francisco, CA, April 2016
- [7] **High Fidelity, High Risk, High Reward: Using High Fidelity Networking Data in Ethically Sound Research**
Mohammad Taha Khan and Chris Kanich. In *Proceedings of the ACM SIGCOMM Workshop on Ethics in Networked Systems (NSEthics '15)*, London, UK, August 2015
- [8] **A Classification Based Framework to Predict Viral Threads**
Hashim Sharif, Saad Ismail, Shehroze Farooqi, **Mohammad Taha Khan**, Muhammad Ali Gulzar, Hasnain Lakhani, Fareed Zaffar and Ahmed Abbasi. In *Proceedings of the Pacific Asia Conference on Information Systems (PACIS '15)*, Singapore, July 2015
- [9] **Every Second Counts: Quantifying the Negative Externalities of Cybercrime via Typosquatting**
Mohammad Taha Khan, Xiang Huo, Zhou Li and Chris Kanich. In *Proceedings of the 36th IEEE Symposium on Security and Privacy (IEEE S&P '15)*, San Jose, CA, May 2015
- [10] **Efficient Relaying Strategy Selection and Signal Combining using Error Estimation Codes**
Mohammad Taha Khan, Talha Anwar, Muhammad Kumail Haider and Momin Uppal. In *Proceedings of the IEEE Wireless Communication and Networking Conference (IEEE WCNC '14)*, Istanbul, Turkey, April 2014

Awards and Honors

Illinois Technology Foundation, Fifty For The Future Award **Jun 2018**
Nominated among the top 50 students across universities and high schools in Illinois contributing towards the field of technology.

Attendee of New Approaches to Cybersecurity Education Workshop **Jun 2018**
Invited to attend a closed workshop discussion with educators and policy makers focused on the future of cybersecurity education.

Open Technology Fund Information Controls Fellowship

Jun 2017 - Jun 2018

Award Amount: \$50,400

Received an individual fellowship grant to study the security and privacy of VPN services and develop an accessible toolset to test VPNs.

Graduate Student Welcome Fellowship

Aug 2014

Award Amount: \$5000

Awarded a welcome fellowship at Stony Brook University for being an outstanding first year Ph.D. student.

Travel Grants

Received multiple travel grants during graduate career to attend and speak at conferences.

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| ▪ Citizen Lab Summer Institute (CLSI) Toronto, ON, Canada | Jun 2018 |
| ▪ Open Technology Fund Summit, Valencia, Spain | Nov 2017 |
| ▪ The Workshop on the Economics of Information Security (WEIS), La Jolla, CA | Jun 2017 |
| ▪ IEEE Symposium on Security and Privacy (IEEE S&P), San Jose, CA | May 2017 |
| ▪ IEEE International Conference on Computer Communications, San Francisco, CA | Apr 2016 |
| ▪ Network and Distributed System Security Symposium (NDSS), San Diego, CA | Feb 2016 |
| ▪ ACM SIGCOMM, London, UK | Aug 2015 |

Talks

1. Understanding How VPNs Work
Guest lecture for ENGR 194 at the University of Illinois at Chicago, Chicago, IL, November 2018
2. An Empirical Analysis of the Commercial VPN Ecosystem
ACM Internet Measurement Conference (IMC '18), Boston, MA, November 2018
3. An End to End Analysis of VPN Services
Citizen Lab Summer Institute (CLSI), Toronto, ON, Canada, Jun 2018
4. Identifying the Need for Longitudinal Data Management in Cloud Storage
ACM Conference on Human Factors in Computing Systems (CHI '18), Montreal, QC, Canada, April 2018
5. Security and Privacy Aspects of VPN Services
Internship talk at International Computer Science Institute, Berkeley, CA, September 2017
6. A Comparison of Cyber and Regular Fraud in the United States
IEEE Symposium on Security and Privacy Workshop on Technology and Consumer Protection (ConPro '17), San Jose, CA, May 2017
7. Understanding Tenant Level Characteristics in Software Defined Datacenters
Internship talk at NEC Labs, America, Princeton, NJ, August 2016
8. High Speed Covert Channels in Data-Center Networks
IEEE Conference on Computer Communications (INFOCOM '16), San Francisco, CA, April 2016
9. Using High Fidelity Networking Data in Ethically Sound Research
ACM SIGCOMM Workshop on Ethics in Networked Systems (NSEthics '15), London, UK, August 2015

10. Quantifying the Negative Externalities of Cybercrime via Typosquatting
IEEE Symposium on Security and Privacy (IEEE S&P '15), San Jose, CA, May 2015

Research Community Services

Program Committees

- International Conference on Computer Applications & Information Security (ICCAIS), 2020
- ACM Internet Measurement Conference (IMC), 2018, *Shadow PC member*

External Reviewer

- USENIX Security Symposium, 2019
- ACM Journal on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2019
- ACM Conference on Human Factors in Computing Systems (CHI) Late Breaking Work, 2019
- Privacy Enhancing Technologies Symposium (PETS), 2018

Teaching Experience

University of Illinois at Chicago

Course Instructor

- CS 211 - Programming Practicum Summer 2019

Teaching Assistant

- ECE 294 - Early Research Scholars Program Fall 2019
- CS 494 - Network Security Spring 2019
- CS 341 - Programming Languages Design and Implementation Spring 2019
- CS 450 - Computer Networking Spring 2018

Stony Brook University

Teaching Assistant

- CSE 215 - Foundations of Computer Science Fall 2014

Lahore University of Management Sciences

Teaching Assistant

- CS 473 - Network Security Spring 2014
- CS 471 - Computer Networks: Principles and Practices Fall 2013

Technical Skills

Languages: Python, C/C++, Java, Bash, R, x86 Assembly

Data Analytics: Spark, Hadoop, SQL

Networking: Wireshark, TCPdump, NS2, OpenFlow, MiniNet, Bro

Web Technologies: HTML/CSS, JavaScript

Tools: Awk, GDB, WEKA, MATLAB, Git, SVN, Simulink, L^AT_EX, Microsoft Office

Cloud Platforms: Amazon EC2, Microsoft Azure, Rackspace, Emulab

Penetration Testing: Backtrack, Kali Linux, Metasploit Framework

Other Interests

Social Work: Volunteer for HOPES Kids Foundation Chicago. Fund raiser for 2005 earthquake victims in Pakistan.

Activities: Photography, Skateboarding, Rock Climbing, Swimming

Languages: English (Native), Urdu (Native)

References

Chris Kanich (*University of Illinois at Chicago*)

ckanich@uic.edu

Blase Ur (*University of Chicago*)

blase@uchicago.edu

Joe Hummel (*University of Illinois at Chicago*)

jhummel2@uic.edu

Narseo Rodriguez (*IMDEA/ICSI*)

narseo@icsi.berkeley.edu