

Dhruv Kuchhal

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January 14, 2022

[LinkedIn](#)

[Google Scholar](#)

RESEARCH INTERESTS

I'm interested in working on real-world computer security problems, often involving measuring, analyzing and understanding large-scale data from Internet-wide systems. These days, I'm working with PayPal on exploring passwordless authentication, specifically the FIDO authentication standard, as an alternate to passwords online.

EDUCATION

- **Georgia Institute of Technology** Atlanta, GA
Doctor of Philosophy in Computer Science 2019 – 2024 (expected)
- **Guru Gobind Singh Indraprastha University** Delhi, India
Bachelor of Technology in Information Technology 2014 – 2018

SELECTED PUBLICATIONS

CONFERENCE

- **Kuchhal, D.** and Li, F.,
A View into YouTube View Fraud.
The Web Conference (WWW), 2022.
Acceptance Rate: 17.7% (323/1822)
- **Kuchhal, D.** and Li, F.,
Knock and Talk: Investigating Local Network Communications on Websites.
ACM Internet Measurement Conference (IMC), 2021.
Acceptance Rate: 27% (53/196) [dl.acm.org] [pdf] [video]
- Redmiles, E.M., Maszkiewicz, L., Hwang E., **Kuchhal, D.**, Liu, E., Morales, M., Peskov, D., Rao, S., Stevens, R., Gligorić, K., Kross, K., Mazurek, M.L., Daume III, H.,
Comparing and Developing Tools to Measure the Readability of Domain-Specific Texts.
Conference on Empirical Methods in Natural Language Processing (EMNLP-IJCNLP), 2019.
Acceptance Rate: 23.8% (684/2877) [aclweb.org] [pdf]
- Redmiles, E.M., Zhu, Z., Kross, S., **Kuchhal, D.**, Dumitras, T. and Mazurek, M.L.,
Asking for a Friend: Evaluating Response Biases in Security User Studies.
ACM Conference on Computer and Communications Security (CCS), 2018.
Acceptance Rate: 16% (134/809) [dl.acm.org] [pdf] [video]
- Gupta, S., **Kuchhal, D.**, Gupta, P., Ahamad, M., Gupta, M. and Kumaraguru, P.,
Under the Shadow of Sunshine: Characterizing Spam Campaigns Abusing Phone Numbers Across Online Social Networks*.
ACM Conference on Web Science (WebSci), 2018.
Acceptance Rate: 27% (30/113) [dl.acm.org] [pdf]
Award: Runner up for Best Student Paper

JOURNAL

- Gupta, S., Bhatia, G., Suri, S., **Kuchhal, D.**, Gupta, P., Ahamad, M., Gupta, M. and Kumaraguru, P.,
Angel or Demon? Characterizing Variations Across Twitter Timeline of Technical Support Campaigners.
The Journal Of Web Science, 2019 [webscience-journal.net] [pdf]

EXPERIENCE

- **PayPal, Inc.** Scottsdale, AZ
Information Security PhD Intern Summer 2021
 - **Managers:** Dr. Adam Oest (Research Scientist) and Dr. RC Johnson (Head of Security Research).
 - **Work:** Exploring deployment efficacy of passwordless authentication (FIDO2).
- **Georgia Institute of Technology (Georgia Tech)** Atlanta, GA
Graduate Research Assistant 2020 - present
 - **Area:** Empirical Measurement, Security and Privacy.
 - **Advisor:** Prof. Frank Li.
 - **Projects:**
 - * Investigating local network communications on websites.
 - * Investigating the YouTube view fraud ecosystem.
- **University of Maryland, College Park (UMD)** College Park, MD
Research Assistant at Security, Privacy, People Lab (SP2) 2017 - 2018
 - **Area:** Usable Privacy and Security.
 - **Advisors:** Prof. Michelle Mazurek and Prof. Elissa Redmiles.
 - **Projects:**
 - * Measuring and improving readability of security advice.
 - * Evaluating response biases in security user studies.
- **Indraprastha Institute of Information Technology, Delhi (IIIT-D)** Delhi, India
Undergraduate Researcher and Research Associate at PreCog Research Lab 2017 - 2019
 - **Area:** Social Computing - Security and Privacy on Online Social Networks (OSNs).
 - **Advisor:** Prof. Ponnurangam Kumaraguru.
 - **Projects:**
 - * Detecting cross-platform spam on online social networks.
 - * Detecting and mitigating misinformation on WhatsApp. [[technical details](#), [press](#)]

RELEVANT GRADUATE COURSEWORK

CS6250 - Computer Networks, **CS6262** - Network Security, **CS8803** - Empirical Measurement and Security, **CS6238** - Secure Computer Systems, **ECE4894** - Malware Reverse Engineering, **CS7641** - Machine Learning, **CS6515** - Graduate Algorithms and **CS6260** - Applied Cryptography.

TEACHING

- **GTA/CS6262 - Network Security:** Responsible for redesigning and grading the Network Monitoring project and holding office hours in Spring and Summer semesters in 2020, with Prof. Wenke Lee.

ACHIEVEMENTS/HONORS

- **USC Annenberg Fellowship, 2019:** Received a 4-year fellowship of USD 34k to pursue a PhD in CS at USC.
- **ACM CCS Student Travel Grant, 2018:** Received a grant of USD 1k to attend ACM CCS in Toronto, Canada.
- **Smart India Hackathon, 2017:** Our team of 6 members advised by [Dr. Sambuddha Roy](#) won the first prize at India's national hackathon (10k+ students), with a total cash prize of Rs. 2 lakh awarded by Government of India. [[GitHub](#)]
- **Recognition of Service Award from ACM, 2016:** Received as founding Chair of a 80+ strong team of ACM-MAIT Student Chapter.

SERVICE

- **Reviewing:** External reviewer, PoPETS '22.
- **Georgia Tech School of Cybersecurity and Privacy:** Member, Faculty Recruiting Committee, 2022.
- **Georgia Tech Student Employee Advisory Board:** Board Member, 2021-22 AY.
- **Georgia Tech School of Computer Science SGA:** Founding member and communications chair, 2021-22 AY.
- **India Club at Georgia Tech:** Board member, 2020-21 AY.
- **Georgia Tech CS PhD admit visit days:** Member of organising committee, 2019-21 AYs.