

# Dhruv Kuchhal

dkuchhal@{pm.me, gatech.edu}  
cc.gatech.edu/~dkuchhal3

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[LinkedIn](#)

[Google Scholar](#)

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## 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. Currently, I'm working with PayPal on exploring passwordless authentication, specifically the FIDO authentication standard, as an alternate to passwords online.

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## 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

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## SELECTED PUBLICATIONS

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### CONFERENCE

- **Kuchhal, D.** and Li, F.,  
**A View into YouTube View Fraud.**  
ACM Web Conference (**WWW**), 2022.  
*Acceptance Rate: 17.7% (323/1822)* [[dl.acm.org](#)] [[pdf](#)] [[video](#)]
- **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**), 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**

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### 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

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- **PayPal, Inc.** Scottsdale, AZ  
*Information Security PhD Intern* *Summers of 2021 & 2022*
  - **Managers:** Dr. Adam Oest and Dr. RC Johnson.
  - **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

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**CS6250** - Computer Networks, **CS6262** - Network Security, **CS8803** - Empirical Measurement and Security, **CS8803** - Internet Data Science, **CS6238** - Secure Computer Systems, **ECE4894** - Malware Reverse Engineering, **CS7641** - Machine Learning, **CS7643** - Deep Learning, **CS6515** - Graduate Algorithms and **CS6260** - Applied Cryptography.

## TEACHING

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- **CS6262 - Network Security:** TA with Prof. Wenke Lee. Redesigned the Network Monitoring project.
- **CS6035 - Information Security:** TA with Prof. Paul Pearce and Prof. Daniel Genkin.

## ACHIEVEMENTS/HONORS

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- **USC Annenberg Fellowship, 2019:** Received a 4-year fellowship of USD 34k/yr to pursue a PhD in CS at USC.
- **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 cash prize of Rs. 1 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

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- **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.