

# Dhruv Kuchhal

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[LinkedIn](#)

[Google Scholar](#)

## RESEARCH INTERESTS

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I have 4+ years experience in working on real-world computer security problems, often involving measuring, analyzing and understanding large-scale data from Internet-wide systems.

## EDUCATION

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

## PUBLICATIONS

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### CONFERENCE

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- **Kuchhal, D.** and Li, F.,  
**Knock and Talk: Investigating Local Network Communications on Websites.**  
*currently under review*
- Redmiles, E.M., Maszkiewicz, L., Hwang E., **Kuchhal, D.**, Liu, E., Morales, M., Peskov, D., Rao, S., Stevens, R., Gligori, K., Kross, K., Mazurek, M.L., Daume III, H.,  
**Comparing and Developing Tools to Measure the Readability of Domain-Specific Texts.**  
2019 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.**  
The 25th ACM Conference on Computer and Communications Security (**CCS**), 2018.  
*Acceptance Rate: 16% (134/809)* [[dl.acm.org](#)] [[pdf](#)]
- 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\*.**  
The 10th ACM Conference on Web Science (**WebSci**), Amsterdam, Netherlands, 2018.  
*Acceptance Rate: 27% (30/113)* [[dl.acm.org](#)] [[pdf](#)]  
**Award: Runner up for Best Student Paper**

### JOURNAL

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- 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](#)]

### WORKSHOP

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- Redmiles, E.M., Morales, M., Maszkiewicz, L., Stevens R., Liu E., **Kuchhal, D.** and Mazurek, M.L.,  
**First Steps Toward Measuring the Readability of Security Advice.**  
The 2018 IEEE Security & Privacy Workshop on Technology and Consumer Protection (**ConPro**), San Francisco, USA, 2018. [[ieee-security.org](#)] [[pdf](#)]

## POSTERS

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- Redmiles, E. M., Hwang, E., **Kuchhal, D.**, Liu, E., Maszkiewicz, L., Morales, M., Peskov, D., Stevens, R., and Mazurek, M. L., **Measuring Security Advice Quality: First Steps**. The 27th USENIX Security Symposium, 2018. [[proposal pdf](#)]
- *I presented this poster at CCS2018:* Redmiles, E. M., Dickerson, J. P., Gummadi, K. and Mazurek, M. L., **Equitable Security: Optimizing Distribution of Nudges and Resources**. The 25th ACM Conference on Computer and Communications Security (CCS), 2018. [[dl.acm.org](#)] [[poster pdf](#)] [[proposal pdf](#)]

## EXPERIENCE

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- **PayPal, Inc.** Scottsdale, AZ  
*Information Security PhD Intern* Summer 2021
  - **Area:** Threat and Fraud detection.
  - **Managers:** Dr. Adam Oest (Research Scientist) and Dr. RC Johnson (Head of Security Research).
  - **Work:** Exploring deployment efficacy of password-less authentication at PayPal.
- **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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**CS8803** - Empirical Measurement and Security, **CS6238** - Secure Computer Systems, **ECE4894** - Malware Reverse Engineering, **CS7641** - Machine Learning, **CS6262** - Network Security, and **CS6260** - Applied Cryptography.

## TEACHING

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- **Spring 2020/CS6262 - Network Security:** ~ 220 students, with Prof. Wenke Lee.
- **Summer 2020/CS6262 - Network Security:** ~ 170 students, with Prof. Wenke Lee.

## ACHIEVEMENTS

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- **Smart India Hackathon 2017, MHRD, Government of India:** Our team of 6 members advised by Dr. Sambuddha Roy won the first prize with a total cash prize of Rs. 2 lakh awarded by Government of India. [[GitHub](#)]
- **Association for Computing Machinery (ACM):** Received 'Recognition of Service Award' as founding Chair of a 80+ strong team of ACM-MAIT Student Chapter.
- **ACM CCS Student Travel Grant:** Grant of USD 1000 to attend ACM CCS in Toronto, Canada.