Maaz Bin Musa

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Education

University of Iowa **Aug. 2019 – June 2024**
PhD in Computer Science *Iowa City, Iowa*

Experience

Research Assistant **Aug 2019 – Present**
SPARTA Lab in University of Iowa *Iowa City, Iowa*
- Designed frameworks for **auditing privacy and compliance online**. Including studying an organizations data collecting and sharing practices. Additionally, I measured the compliance practices of these organizations to determine if user rights are upheld or not.

Research Intern **May 2022 – Aug 2022**
ICSI Lab *Berkeley, California*
- Lead an investigation on first-party tracking prevalence. Post third-party depreciation, I wanted to quantify collusion between publishers and advertisers facilitated via **first-party cookies.**

Research Assistant **Aug 2018 – Aug 2019**
TPI Lab in LUMS *Lahore, Pakistan*
- Collaborated on internet measurement projects with a focus on auditing data flows online. Created and deployed **honeypots for online malicious / tracking entities.** Built pipelines using selenium and python to leak personal identifiers and monitor how they were used / misused.

Selected Publications

Forms of Disclosure | *The Path to Automated Data Privacy Audits* **June 2023**
- Mihailis Diamantis, **Maaz Bin Musa**, Lucas Ausberger and Rishab Nithyanand
- Evaluated CCPA compliance of 400 data brokers registered with the Attorney Generals Office.
- Published in Harvard Journal of Law and Technology

ATOM | *Ad-Network Tomography* **July 2022**
- **Maaz Bin Musa** and Rishab Nithyanand
- Uncovered undisclosed relationships between trackers and advertisers with 100% accuracy.
- Leveraged ad personalization as a vantage point for uncovering server side relationships.
- Published in Privacy Enhancing Technologies Symposium (PETS) 2022
- **Runner-up for the Andreas Pfitzmann best student paper award**

CanaryTrap | *Detecting Data Misuse by Third-Party Apps on Online Social Networks* **July 2020**
- Shehroze Farooqi, **Maaz Bin Musa**, Zubair Shafiq and Fareed Zaffar
- Designed a matrix based scalable honeytrap to uncover server side data sharing.
- Caught 16 entities misusing user data for ransomware and personalized advertisement.
- Published in Privacy Enhancing Technologies Symposium (PETS) 2020

Talks and Presentations

Privacy Hygiene | *Society of Privacy, Law and Technology* **Sep 2023**
Graduate Research Symposium | *Empowering Transparency & Accountability in the online world* **Nov 2023**
DataSkeptic | *Ad-tech series* **Jul 2022**

Awards & Honors

3MT 2023 | *Peoples choice award* **Nov 2023**
Travel grant | *PoPETs* **Aug 2022**

Research Projects

SoK | *Optimizing privacy policy compliance analysis* **Present**
- Exploring obstacles and opportunities in compliance analysis using privacy policies.
- Identifying impactful phases of compliance measurement.

CPP Dataset | *Privacy policy dataset for CCPA* **Present**
- Interpret CCPA requirement mandates.
- Analyze CCPA mandates extracted from privacy policies by domain experts.

Relevant Coursework

- Online Advertising and Tracking
- Privacy and Anonymity
- Web Mining
- Privacy, Law and Technology
- Design and Analysis of Algorithms
- Information Retrieval
- Data structures
- Object Oriented Programming