Aafaq Sabir

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Email: asabir2@ncsu.edu, Location: Raleigh, North Carolina, USA

EDUCATION

North Carolina State University (NCSU)
- PhD Computer Science (CGPA 4.00)

  Advisor: Dr. Anupam Das

  August 2021 – May 2026 (Expected)

Lahore University of Management Sciences (LUMS)
- BS Computer Science (CGPA 3.57, SCGPA 3.82)

  Aug 2016 – May 2020

PROFESSIONAL EXPERIENCE

North Carolina State University (NCSU)
- Graduate Research Assistant

  (August 2021 – Present)

Allthenticate (Houston, TX)
- Software Engineering Intern

  (May – August 2023)

Educative.io
- Technical Content Engineer

  (August 2020 – September 2021)

Lahore University of Management Sciences (LUMS)
- Teaching Assistant: CS 100, CS 200

North Carolina State University (NCSU)
- Teaching Assistant (Spring 2023)

  CSC 574 (Computer and Network Security)
  Delivered lectures on Anonymous communication

COMMUNITY SERVICE

North Carolina School of Science and Mathematics
- Summer Research Mentor (2022, 2024)

LUMS National Outreach Program[1]
- Instructor, Computer Science Course (2018, 2019)

EXTRA-CURRICULAR ACCOMPLISHMENTS

2019 - Vice President IEEE Computer Society, LUMS

2018 – Event Head CodinGuru

SKILLS

- **Programming languages:** C++, C, Python, JavaScript, Golang, Java, Haskell
- **Cloud computing:** AWS, GCP
- **Dev stack:** MEVN Stack, Nuxt.js, Android Dev,
- **Analytics/Research:** NLP, LLMs (Fine-tuning proprietary and open-source models), ML (TensorFlow), SAS, Browser Extension Dev., Qualitative and Quantitative studies, Algorithmic auditing, Controlled Experiments, Web crawling (Selenium).
- **Other skills:** Socket Programming, Git, Web Dev

PUBLICATIONS

- Spying through your voice assistants: realistic voice command fingerprinting. *32nd USENIX Security Symposium (USENIX Security 23), 2419-2436*. Dilawer Ahmed*, **Aafaq Sabir**, and Anupam Das.
- Speaker Orientation-Aware Privacy Control to Thwart Misactivation of Voice Assistants. *2023 53rd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN).* Shaohu Zhang*, **Aafaq Sabir**, and Anupam Das.
- Hey Alexa Who am I talking to?: Analyzing User's Perception and Awareness regarding Third-party Alexa Skills. *In CHI Conference on Human Factors in Computer Systems (CHI) 2022, April 29-May5, 2022, New Orleans, LA, USA. ACM New York, NY, USA, 15 pages.* **Aafaq Sabir**, Evan Lafontaine, and Anupam Das.
- Analyzing the Impact and Accuracy of Facebook Activity on Facebook Ad-Interest Inference Process. *Proceedings of the 25th ACM Conference On Computer-Supported Cooperative Work And Social Computing (CSCW), 2022*. **Aafaq Sabir**, Evan Lafontaine, and Anupam Das.
- Understanding people's attitude and concerns towards adopting IoT devices. In *Proceedings of the 39th ACM Conference on Human Factors in Computing Systems (CHI)*, pages 1–10, 2021. Evan Lafontaine, **Aafaq Sabir**, and Anupam Das.
- Understanding the Privacy Implications of Adblock Plus's Acceptable Ads. Ahsan Zafar, **Aafaq Sabir**, Dilawer Ahmed, and Anupam Das. *ACM ASIA Conference on Computer and Communications Security (ASIACCS), 2021*

RESEARCH INTERESTS

- Privacy and security of emerging IoT ecosystem
- Evolution of ads on voice interfaces
- Online targeted advertisement and user profiling
- Privacy implications of inaccurate user perception regarding smart home assistants third-party voice apps

NOTABLE COURSES

Grad: Computer and Network Security, Cryptography, OS Security, Adv Internet Protocols, Compiler Construction

Undergrad: Network Security, Privacy in Digital Age, Software Engineering, Natural language Processing, Data Mining, Probability and Statistics, Operating systems, Algorithms

SOFTWARE ENGINEERING PROJECTS

- **CheckMate**

Built an online platform to conduct a coding competition. The web app runs the submitted code (C++) and evaluate the results based on the provided test cases and updates the leaderboard.

Technologies used: React.js, Node.js, MongoDB

- **QAnon**

Built an online anonymous question answering platform.

Technologies used: Vue.js, Node.js, MongoDB

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[1] https://nop.lums.edu.pk