# Noemi Glaeser

# <u>nglaeser@umd.edu</u> • <u>nglaeser.github.io</u> <u>LinkedIn,GitHub: @nglaeser</u>

#### **Education**

## Ph.D., Computer Science

estimated December 2024

University of Maryland (UMD), College Park, MD

Max Planck Institute for Security and Privacy (MPI-SP), Bochum, Germany

Maryland-Max Planck joint program • advised by Jonathan Katz and Giulio Malavolta

## M.S., Computer Science

May 2021

University of Maryland, College Park, MD (GPA 3.9/4.0)

### B.S., Mathematics & B.S.C.S., Computer Science

May 2019

University of South Carolina Honors College, *Columbia*, *SC* summa cum laude (GPA: 4.0/4.0) • Minor, Music • Flute performance certificate

### **Selected Publications**

\* = authors listed in alphabetical order

## **Preprints**

- [8] N Glaeser, I Seres, M Zhu, and J Bonneau. (2023). Cicada: A framework for private non-interactive on-chain auctions and voting. https://eprint.iacr.org/2023/1473.
- [7] I Seres, N Glaeser, and J Bonneau. (2023). Short Paper: Naysayer Proofs. https://eprint.iacr.org/2023/1472.
- [6] R De Viti, I Scheff, N Glaeser, B Dinis, R Rodrigues, B Bhattacharjee, A Hithnawi, D Garg, P Druschel. (2022). CoVault: Secure High-Stakes Analytics. <a href="https://arxiv.org/abs/2208.03784">https://arxiv.org/abs/2208.03784</a>.

### Conference Papers

- [5] \*B Abdolmaleki, N Glaeser, S Ramacher, D Slamanig. (2024). Universally Composable NIZKs: Circuit-Succinct, Non-Malleable and CRS-Updatable. *CSF* 2024. <a href="https://eprint.iacr.org/2023/097">https://eprint.iacr.org/2023/097</a>.
- [4] \*N Glaeser, D Kolonelos, G Malavolta, A Rahimi. Efficient Registration-Based Encryption. *ACM CCS 2023*. https://eprint.iacr.org/2022/1505.
- [3] \*N Glaeser, M Maffei, G Malavolta, P Moreno-Sanchez, E Tairi, SAK Thyagarajan. Foundations of Coin Mixing Services. *ACM CCS 2022*. https://dx.doi.org/10.1145/3548606.3560637.
- [2] N Glaeser and A Wang. Access control for a database-defined network. *IEEE Sarnoff Symposium 2016*. https://dx.doi.org/10.1109/SARNOF.2016.7846728.

#### Other

[1] N Glaeser. (2021). Cryptographic secret sharing packet. *UMD Girls Talk Math summer camp*. https://github.com/nglaeser/gtm2021/tree/main/packet.

#### Service

## **Program Committee**

Financial Crypto (2024), IEEE S&P Poster PC (2023), NDSS Student Support Committee (2023)

### **External Reviewer**

IACR Crypto (2023), ACM CCS (2023, 2020), PETS (2023.3, 2022.4, 2022.1), PKC (2022)

## Founder & Organizer

UMD CS Graduate Peer Mentoring Program

fall 2021-present

#### Mentor

UMD CS Graduate Peer Mentoring Program

fall 2021-present

UMD Iribe Initiative for Inclusion & Diversity in Computing (I4C)

fall 2020

### **Technical Skills**

Strong: *Python* • *LaTeX* • *HTML/CSS/Javascript* 

Average:  $Bash \cdot C + + \cdot Rust$ 

### Funding & Awards

**NSF Graduate Research Fellowship**, National Science Foundation (NSF)

2020-2023

# Phi Beta Kappa Honor Society

2019

Oldest and most prestigious academic honor society in the U.S.

Computational Science Fellowship (Math & Computing track), Dept of Energy 2019, declined Goldwater Scholarship (Honorable Mention) 2018

#### **Research Positions**

a16z crypto

summer 2023

Research Intern

Conducting fundamental research in cryptographic protocols for blockchains, helping portfolio companies with technical research problems, writing informational materials for public.

### NTT Research, Inc.

*summer* 2022

Research Intern, supervised by Sanjam Garg

Working on a scheme and formal framework for threshold cryptocurrency wallets in the hot-cold paradigm with strong trust and recovery guarantees.

### Fermi National Accelerator Laboratory, Particle Astrophysics

summer 2018

Grace Hopper Computing Intern

Improved efficiency of the Dark Energy Survey's image processing pipeline for optical counterparts of gravitational wave events from avg. 5-8 hrs to 30 min (10-16x). Published two papers. Code available on GitHub at <u>SSantosLab/gw\_workflow</u> (Python, Bash).

## **Temple University Computer Science Department**

summer 2016

NSF Research Experience for Undergraduates (REU)

Implemented an access-control security application for the database-defined software-defined network (SDN) controller Ravel ( $\underline{ravel-net.org/}$ ). Work published in [2]. Code available on GitHub at  $\underline{ravel-net/REU-access-control}$  (Python, PostgreSQL).

## **Languages**

Native proficiency: English, German, Italian

Conversational proficiency: French, American Sign Language (ASL)