

Noemi Glaeser

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nglaeser.github.io

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Education

University of Maryland*, College Park, MD, USA *Estimated May 2024*

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

Ph.D., Computer Science • *Maryland-Max Planck joint program*

Advisors: Jonathan Katz* and Giulio Malavolta†

University of Maryland, College Park, MD, USA *May 2021*

M.S., Computer Science

University of South Carolina Honors College, Columbia, SC, USA *May 2019*

B.S., Mathematics • B.S.C.S., Computer Science • *summa cum laude*

Minor, Music • Flute performance certificate

Current Projects

Anonymous Atomic Locks, Re-evaluated. *With Giulio Malavolta, Pedro Moreno-Sanchez, and Sri Aravinda Krishnan Thyagarajan.*

Cryptographic analysis of a payment channel hub (PCH) protocol.

Selected Publications

Conference Papers

1. N. Glaeser and A. Wang. (2016). Access control for a database-defined network, *Proceedings of IEEE 37th Sarnoff Symposium*. <http://dx.doi.org/10.1109/SARNOF.2016.7846728>.

Journal Papers

2. K. Herner et al. (2020). The updated DESGW processing pipeline for the third LIGO/VIRGO observing run. *EPJ Web Conf.*, 245, 01008. <https://doi.org/10.1051/epjconf/202024501008>.
1. K. Herner et al. (2020). Optical follow-up of gravitational wave triggers with DECAM during the first two LIGO/VIRGO observing runs. *Astronomy & Computing*, 33, 100425. <https://doi.org/10.1016/j.ascom.2020.100425>.

Other

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

Under Preparation

1. R. De Viti, B. Dinis, N. Glaeser, et al. (2021). CoVault: Secure High-Stakes Analytics. Under revision.

Talks & Posters

6. Mathematically Sharing Secrets. (2021). Invited talk, *UMD Girls Talk Math Spring Event*, Virtual.
5. Improving bounds on entropy of odd cycle graphs. (2019). (Advised by Joshua Cooper.) Poster, *UofSC Discovery Day*, Columbia, SC.
4. Improvements to image processing in the DES-GW pipeline. (2018). (Advised by Kenneth Herner.) Talk, *Summer Internship in Science & Tech (SIST) Presentation Day*, Fermi National Accelerator Laboratory, Batavia, IL.
3. Access control for a database-defined network. (2016). (Advised by Anduo Wang.) Talk, *Temple University REU Presentations*, Philadelphia, PA.
2. Access control for a database-defined network. (2016). (Advised by Anduo Wang.) Poster, *IEEE Sarnoff Symposium*, Newark, NJ.
*Won 3rd place Poster Award
1. Generating geographic and temporal heat maps of aflatoxin incidence using regularized linear models. (2017). (Advised by Gabriel Terejanu.) Poster, *UofSC Discovery Day*, Columbia, SC.

Service

External Reviewer

PETS 2022.1, PKC 2022

Organizer

UMD Cryptography Reading Group

Fall 2020 – Spring 2021

UMD CS GradCo Peer Mentoring Program (inaugural year)

Fall 2021 – present

Mentor

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

Fall 2020

UMD CS GradCo Peer Mentoring Program

Fall 2021 – present

Funding & Awards

NSF Graduate Research Fellowship, *National Science Foundation (NSF)* 2019 – 2024

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

Technical Skills

| | | | |
|------------|-----------------|------------|-----------------|
| Python | • • • • • • • • | HTML/CSS | • • • • • • • • |
| LaTeX | • • • • • • • • | Bash | • • • • • • • • |
| Java/C++ | • • • • • • • • | Javascript | • • • • • • • • |
| Linux/UNIX | • • • • • • • • | PostgreSQL | • • • • • • • • |

Languages

Native proficiency: English, German, Italian

Conversational proficiency: French, American Sign Language (ASL)

Elementary proficiency: Latin

Selected Coursework

(* denotes honors course; † denotes graduate course.)

Mathematics

Computational Number Theory†

Analysis I* & II*

Algebraic Structures I & II*

Computer Science

Applied Mechanism Design for Social Good†

Intro to Secure Distributed Computation†

Intro to Quantum Information Processing†

Algos in ML: Guarantees & Analyses†

Applied Crypto & Hostile Gov'ts (audit)†

Interactive Technologies†

Human Factors in Security & Privacy†

How to Conduct Great Research (seminar)†

Computer & Network security†

Program Analysis & Understanding†

Introduction to Cryptography*

Computer Architecture*

Theory of Computation

Ethical Hacking

Information Security Principles