Noemi Glaeser

+1 571-373-6994
nglaeser@umd.edu
nglaeser.github.io

LinkedIn, GitHub: **nglaeser**
ORCID: **0000-0002-6464-2534**

Education

University of Maryland*, *College Park, MD*   *expected May 2024*

Max Planck Institute for Security and Privacy†, *Bochum, Germany*

Ph.D., Computer Science

Advisors: Jonathan Katz* and Gilles Barthes†

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

B.S., Mathematics • B.S.C.S., Computer Science

Minor, Music • Flute performance certificate

GPA: 4.0/4.0 • *summa cum laude*

Thomas Jefferson High School for Science & Technology, *Alexandria, VA*   *Jun 2015*

#1 public U.S. high school according to Newsweek (2014-2016)

Advanced Studies Diploma

GPA: 4.46/4.0

Publications

3. K. Herner <u>et al.</u> Optical follow-up of gravitational wave triggers with DECam: the Details Paper. In review.

2. K. Abdelfatah, J. Senn, <u>N. Glaeser</u>, and G. Terejanu. (2019). Prediction and Measurement Update of Fungal Toxin Geospatial Uncertainty using a Stacked Gaussian Process. *Agricultural Systems*, *176*, 102669. https://doi.org/10.1016/j.agsy.2019.102662.

1. <u>N. Glaeser</u> 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.

Funding

Graduate Research Fellowship, *National Science Foundation (NSF)*   *2019 – 2024*
      $34,000 annually for doctorate study and research

Computational Science Fellowship (Math & Computing track), *US Dept of Energy*   *declined, 2019*

Goldwater Scholarship (Honorable Mention)   *2018*

Science Undergraduate Research Fellowship (SURF), *UofSC Honors College*   *Fall 2018*
      $1,060 for work with Dr. Cooper

Grace Hopper Scholar, *Anita Borg Institute*   *2017*
      Funding to attend the 2017 Grace Hopper Celebration of Women in Computing

Magellan Scholar Award, *UofSC*   *2016*
      $2,500 for work with Dr. Terejanu

UofSC McNair Scholar,   *2015-19*
      Highest out-of-state merit-based scholarship

Achievements

2019 UofSS Outstanding Senior in Mathematics

2018 BSides Charleston Capture the Flag (cybersecurity competition), *2nd place*

2017 BSides Charleston Cryptography Challenge, *1st place*

2016 IEEE Sarnoff Symposium Poster, *3rd place*

2016 MAA Southeastern Math Jeopardy, *3rd place*

Research Experience

4. **Improving bounds on entropy of odd cycle graphs**   *Jan 2018 – Apr 2019*
   UofSC Mathematics Department, *Columbia, SC*
   Advisor: Joshua Cooper

3. **Improvements to image processing in the DES-GW pipeline**   *May – Aug 2018*
   Fermi National Accelerator Laboratory, Particle Astrophysics, *Batavia, IL*
   Advisor: Kenneth Herner

2. **Access control for a database-defined network**   *May – Jul 2016*
   Temple University Computer Science Department, *Philadelphia, PA*
   Advisor: Anduo Wang

1. **Generating geographic and temporal heat maps of aflatoxin**   *Jan 2016 – Dec 2017*
   incidence using regularized linear models
   UofSC Computer Science Department, *Columbia, SC*
   Advisor: Gabriel Terejanu

Selected Projects

Graph cyclone • *Python* • University of South Carolina   *2018 – 2019*

    https://github.com/nglaeser/graph_cyclone

    https://pypi.org/project/graph-cyclone/

    Cycle graph calculation utilities for work with Dr. Cooper

Open vLab • *Django, OpenFlow, Javascript* • University of South Carolina   *2018 – 2019*

    https://github.com/SCCapstone/OpenVLab

    Educational network virtualization framework

GW workflow • *Python, Bash* • Fermilab   *2018*

    https://github.com/SSantosLab/gw_workflow

    Optimization of pipeline for optical counterparts of gravitational waves (10x speedup)

Access control for a database-defined network • *Python, PostgreSQL* • Temple Univ   *2016*

    https://github.com/ravel-net/REU-access-control

    http://ravel-net.org/

    Implementation of an access-control security application in the software-defined
    network controller Ravel

Memberships

Phi Beta Kappa Society   *2019-*

Association for Computing Machinery   *2018-*

Leadership & Involvement

UofSC Cybersecurity Club   *Jan 2016 – Apr 2019*

    Webmaster (Spring 2018 – Spring 2019)

Gamecock Math Club/Pi Mu Epsilon Math Honor Society   *Mar 2016 – Apr 2019*

    Treasurer (Fall 2017 – Spring 2019)

McNair Scholar Buddy   *Aug 2016 – Apr 2019*

Association for Women in Mathematics at UofSC   *Jan 2017 – Apr 2018*

    Founding member, Treasurer & Secretary (Spring 2017 – Spring 2018)

Technical Skills

Python	• • • • • • • ○ ○	LaTeX	• • • • ○ ○ ○ ○ ○
Java/C++	• • • • • • • ○	HTML/CSS	• • • • ○ ○ ○ ○
Linux/UNIX	• • • • • • • ○	PostgreSQL	• • • ○ ○ ○ ○ ○
Bash	• • • • ○ ○ ○ ○		

Languages

Native proficiency: English, German, Italian

Conversational proficiency: American Sign Language

Elementary proficiency: Latin, French

Selected Coursework

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

Mathematics

Computational Number Theory†

Linear Algebra

Ordinary Differential Equations

Analysis I* & II*

Algebraic Structures I & II*

Discrete Mathematics I

Computer Science

Computer & Network security†

Program Analysis & Understanding†

Introduction to Cryptography*

Computer Architecture*

Operating Systems

Data Structures & Algorithms

Introduction to Computer Networks

Theory of Computation

Ethical Hacking

Information Security Principles

Text Processing*

November 2019