Matthew Gregoire

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EDUCATION

UNC CHAPEL HILL

PH.D. IN COMPUTER SCIENCE Dec 2023 - Present M.S. IN COMPUTER SCIENCE Dec 2023 B.S. IN COMPUTER SCIENCE B.S. IN MATHEMATICS May 2021 Cum. GPA: 3.98 / 4.0 Dean's List (All semesters)

NORTH CAROLINA SCHOOL OF SCIENCE AND MATH

May 2017 | Durham, NC Cum. GPA: 5.54 / 4.0

LINKS

Website

GitHub: MatthewGregoire42 LinkedIn: MatthewGregoire

COURSEWORK

GRADUATE

Logical Foundations Cryptography Computer Security Privacy Enhancing Technologies Algorithms

UNDERGRADUATE

Software Engineering Quantum Computing Operating Systems CS Education Research

SKILLS

PROGRAMMING

Languages: Python • Rust • Java • C • C++ TypeScript • JavaScript Verilog • MATLAB Tools: &TEX • Bash • Jupyter • Git SQL • MongoDB • ReactJS Firebase • Kubernetes • Coq numpy • matplotlib • qiskit

OTHER

Play Chess and Go casually. Can solve a Rubik's cube in under fifteen seconds.

EXPERIENCE

GRADUATE TECHNICAL INTERN | Cisco

May 2022 - August 2022

Worked on a software development team in an industry setting to transition a legacy system to a new platform.

- Implemented, tested, and documented changes to the codebase
- Documented a legacy API interface
- Saw agile software engineering from an industry perspective

TEACHING ASSISTANT | UNC CS DEPARTMENT

Fall 2018 – Spring 2021, Fall 2023

Assisted 1,000 students across four undergraduate courses: intro programming, discrete structures, computer organization, and cryptography.

- Worked to design the syllabus and electronics labs for Computer Organization
- Wrote and graded questions for quizzes and final exams
- Helped students understand concepts and assignments in office hours

PUBLICATIONS

Gregoire, M., Pierce, M., & Eskandarian, S. (2025). Onion Franking: Abuse Reports for Mix-Based Private Messaging. Network and Distributed Systems Security, 2025.

Gregoire, M., Thomas, R., & Eskandarian, S. (2024). CheckOut: User-Controlled Anonymization for Customer Loyalty Programs. Proceedings on Privacy Enhancing Technologies Symposium, 2024(3) (pp. 224–245).

Ryan, K., Gregoire, M., & Sturton, C. (2023, October). SEIF: Augmented Symbolic Execution for Information Flow in Hardware Designs. In Proceedings of the 12th International Workshop on Hardware and Architectural Support for Security and Privacy (pp. 1-9).

Deutschbein, C., Meza, A., Restuccia, F., Gregoire, M., Kastner, R., & Sturton, C. (2022). Toward hardware security property generation at scale. IEEE Security & Privacy, 20(3), 43-51.

PERSONAL PROJECTS

8-BIT COMPUTER

Summer 2019

Built a fully programmable 8-bit computer using integrated circuits, wires, and breadboards, and designed a corresponding assembly language. Based on tutorials by Ben Eater. Full project description on GitHub.

RECOGNITIONS

- 2020 Completion of Qiskit Global Summer School in Quantum Computing
- 2019 Best Use of BlockStack API, PackHacks Hackathon
- 2017 NC State Champion, David Ricardo Economics Challenge
- 2017 Bowman-Brockman Scholar, NCSSM
- 2015 First Place, FIRST Robotics North Carolina Regional