

Sam A. Markelon

markelon@protonmail.com
smarky7cd.github.io

Education

2020–	PhD in Computer Science, University of Florida Florida Institute for Cybersecurity Research
2016–2020	BS in Computer Science, University of Connecticut Minor in Mathematics Summa Cum Laude Honors Scholar

Professional Experience

Summer 2019	NCC Group (New York, NY) Cryptography Services Intern
Summer 2018	Institut de Physique Nucléaire d'Orsay (Orsay, France) Scientific Computing Intern
Summer 2017	Jefferson National Laboratory (Newport News, VA) Software Engineering Intern

Teaching Experience

All as undergraduate teaching assistant at the University of Connecticut.

Spring 2020	CSE 3400: Introduction to Computer and Network Security
Fall 2019	
Spring 2019	CSE 3150: C++ Essentials
Fall 2018	CSE 2050: Data Structures and Object Oriented Programming

Awards and Grants

2020	University of Florida Graduate School Preeminence Award
2019	Barry M. Goldwater Scholarship
2018	University of Connecticut IDEA Grant NTRUEncrypt implementation and usage research.
2016	University of Connecticut STEM Scholar

Publications

Journal and Conference Papers

1. **The DecCert PKI: A Solution to Decentralized Identity Attestation and Zooko's Triangle**
Sam A. Markelon and John True.
IEEE DAPPs 2022
Best Paper Award.
2. **A Semi-Quantum Extended B92 Protocol and its Analysis**
Walter O. Krawec and Sam A. Markelon.
Proc. SPIE 11391, Quantum Information Science, Sensing, and Computation XII, (24 April 2020).
3. **Genetic Algorithm to Study Practical Quantum Adversaries**
W.O. Krawec and S.A. Markelon.
ACM GECCO (2018) Kyoto Japan, pages 1270-1277.

Posters and Poster Papers

4. **Discovery of Robust Protocols for Secure Quantum Cryptography**
W.O Krawec and S.A. Markelon.
ACM GECCO (2019) New York, NY, pages 379-380.
5. **gemcWeb: A Cloud Based Nuclear Physics Simulation Software**
Sam A. Markelon.
APS DNP CEU Poster Session, Fall 2017.

Preprints

6. **Covert Message Passing over Public Internet Platforms Using Model-Based Format-Transforming Encryption**
Luke A. Bauer, James K. Howes IV, Sam A. Markelon, Vincent Bindschaedler, and Thomas Shrimpton.
arXiv:2110.07009.

Extracurricular Activities

- **Association of Computing Machinery Student Chapter**
Information Security (Cryptography) Group Leader
- **Upsilon Pi Epsilon**
- **UConn Mixed Martial Arts Club**
Vice President, Treasurer