Simone Ragusa

Contact

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Interests

Applied cryptography, high-assurance cryptography, web security, online privacy, software reproducibility.

Education

University of Padua, Padua, Italy

Master's degree in Cybersecurity, September 2025 — 110 cum laude

- "Fuzzy Searchable Symmetric Encryption: Design and Implementation of a Novel Scheme Toward Real-World Applications"
- Thesis supervisor: Nicola Laurenti

Bachelor's degree in Computer Engineering, March 2022 — 101 out of 110

- Courses in Computer Architecture, Software Engineering, Telecommunications, and Electronics

Professional Experience

TEXA S.p.A., https://www.texa.it

Cybersecurity Engineer — **June 2022 – August 2023**

Drafted operating procedures providing guidelines for secure software development. Performed vulnerability assessments and penetration testing on several web applications. Developed a background service to automate file signing and exchange via SFTP over the ENX network. Designed the new internal cryptographic key inventory to promote careful scoping and effective key rotation.

Teaching

Information Security, University of Padua

Teaching Assistant — **2026 – Present**

Designed hands-on laboratory projects including the implementation of symmetric encryption primitives and padding-oracle attacks, hash functions, message authentication codes and timing side-channel attacks, and digital signatures. Graded student submissions.

Other Activities

Research

Searchable Symmetric Encryption — **November 2025 – Present**

- Research grant by University of Padua

Certifications

Cryptography I, Coursera
https://coursera.org/verify/P8LLQSUHS6GJ — **April 2021**

Programming Languages

Strong: Go, Python, Bash
Intermediate: C, C++, Nix, JavaScript
Basic: Lua, PHP, Java, Kotlin, Rust