

Christian Coduri

Turin, Italy

coduric



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https://coduri.cc/



Employment History

Nov 2023 - May 2024



External Collaborator, PWNX s.r.l., Remote

- Designed and implemented ten cryptography laboratories in *Python*, employing a "Capture the Flag" approach to enhance learning experiences.
- Developed more than thirty personalized one-on-one modules focused on *Linux Security* and *Cryptography Theory* for individualized learning.

May 2019 - Jun 2019



IT Intern, SECAM s.p.a., Sondrio (SO).

Education

11/2025 - Present



Ph.D. in Computer Engineering, Polytechnic University of Turin

- **Research Area:** *Security in Distributed Artificial Intelligence Systems*

10/2023 - 10/2025



M.Sc. Cybersecurity Engineering, Polytechnic University of Turin.

- **Specialist track:** Cryptography expert.
- **Thesis title:** *Evaluating Backdoor Attacks Over Centralized and Distributed Medical Image Processing.*
- **Graduation Mark:** 110/110 cum laude | **GPA:** 29.65/30

10/2020 - 10/2023



B.Sc. Computer Systems and Networks Security, University of Milan.

- **Thesis title:** *Advanced Techniques of Visual Cryptography and Steganography for Sharing of Medical Images.*
- **Graduation Mark:** 110/110 cum laude | **GPA:** 29.38/30

2015 - 2020



High School Diploma in Computer Science, ITIS E. Mattei (Sondrio).

- **Graduation Mark:** 96/100

Additional Courses

Oct 2024 - Jan 2025



Automotive Cybersecurity, Challenge@PoliTO by Stellantis

Collaborated in a multidisciplinary team to explore challenges related to future Autonomous Vehicles and V2X technology. My role mainly focused on identifying potential cybersecurity vulnerabilities and exploring theoretical solutions.

Feb 2023 - May 2023



National Cybersecurity Training Program, Cybersecurity National Lab

Selected through the *CyberChallenge* initiative as one of 20 students from the University of Milan to join Italy's main government program for identifying and training future cybersecurity professionals.




Nov 2022




International Cyber Conflicts, The State University of New York (*Remote*).

Gained an understanding of international cybersecurity policies, as well as the psychological and sociopolitical factors influencing attackers and cyberattacks.



Projects

- 2024 – 2025  **VisualCrypto.** A Python-based toolkit for *Visual Secret Sharing*, implementing cryptographic techniques that split a secret image into multiple shares. The project allows adding new cryptographic schemes and includes a web interface for ease of use. <https://github.com/coduri/VisualCrypto>.
- 2020 – 2022  **Get The Cookie.** A YouTube Channel with the goal of helping university and high school students understand computer science concepts (*in Italian*). Achieved over 1.1 million views, demonstrating the significant impact of the project. <https://www.youtube.com/GetTheCookie>.
- 2020 – 2021  **FitFocus.** An online fitness platform that allowed users to manage nutrition, track progress, and organize workout plans. Trainers could monitor clients' progress and provide feedback. Initially built on a *LAMP stack*, the backend was later transitioned to *NodeJS* to improve functionality and performance.



Publications

- 1 Christian Coduri et al. "Formal Verification and Mitigation of Vulnerabilities in the IMDGuard Protocol". In: *IEEE 24th International Conference on Pervasive Computing and Communications (PerCom)*. 2026 (ACCEPTED).
- 2 Christian Coduri and Stelvio Cimato. "A Framework for Secure Sharing of Medical Images Based on Visual Cryptography". In: *IEEE 49th Computers, Software, and Applications Conference (COMPSAC)*. 2025, pp. 2008–2013.  DOI: 10.1109/COMPSAC65507.2025.00280.

Awards

- 2025 – 2026  **Fondazione Felix Leemann Scholarship** - Lugano (Switzerland). [6000 CHF]
Awarded for academic excellence as a Swiss student from the Canton of Graubünden.
- Mar 2024  **STart STEM Scholarship** by the Unione Industriali Torino. [3000€]
 - Selected as one of the top 64 first-year master's students in STEM disciplines at Politecnico University and University of Turin.
 - Delivered 40 hours of **math academic support** to lower secondary school students.

Professional Development and Activities

- Jun 2024 – now  **De Componendis Cifris APS**, Young Member
- 17 May 2022  **Cybersecurity Introduction - Portogruaro (Italy)**, Remote Speaker
Gave an introductory talk on cybersecurity at *ISIS Gino Luzzatto (VE)*, focusing on key concepts and online security awareness.