


Carlo Mazzocca

Department of Computer and Electrical Engineering
and Applied Mathematics

University of Salerno, Fisciano, Italy

cmazzocca@unisa.it

 [ORCID](#)

EDUCATION

2020-2024 University of Bologna, Bologna (Italy) - Ph.D. in Computer Science and Engineering

- Thesis: "Adaptable Security in the Cloud-to-Thing Continuum"
- Research activities: authentication and authorization solutions for cloud-to-thing continuum, system modeling, distributed ledger technology, and federated learning

2023 Florida International University (FIU), Miami (United States) – International Ph.D. Exchange (6 months)

- Research activities: revocation of verifiable credentials in IoT networks, survey on decentralized identifier and verifiable credential

2018-2020 University of Napoli Federico II, Napoli (Italy) - Master's degree in Computer Engineering Cum Laude (Summa Cum Laude) with a GPA of 29.75 on a 30.00 scale

- Thesis: "Secure methodologies for secure microservice applications based on the Security-by-Design paradigm"

2015-2018 University of Napoli Federico II, Napoli (Italy) - Bachelor's degree in Computer Engineering Cum Laude (Summa Cum Laude) with a GPA of 29.29 on a 30.00 scale

- Thesis: "Fault tolerance and replication in container-based software systems"

WORK AND TEACHING EXPERIENCE

2024-now Assistant Professor in Tenure Track University of Salerno, Fisciano (Italy)

2023-2024 Postdoc researcher at University of Bologna, Bologna (Italy)

- Research activities: digital identity, security mechanisms based on distributed ledger technologies, and authentication and authorization solutions for the cloud-to-thing continuum

- 2023/2024 Professor in Securing the Internet of Things: Emerging Trends, Challenges, and Future Research Directions, International Doctorate in Information and Communication Technologies, University Modena and Reggio Emilia, Modena (Italy)**
- 2023/2024 Professor in Systems and Networks for IoT, Fondazione Istituto Tecnico Superiore Tecnologie Industrie Creative, Bologna (Italy)**
- 2023/2024 Professor in Laboratory of IoT Application Development, Computer Engineering, University Luigi Vanvitelli, Aversa (Italy)**
- 2021/2024 Professor in Fundamentals of Security and Cryptography, Master in Cybersecurity: from design to operations, Fondazione Alma Mater, Bologna (Italy)**
- 2023/2024 Assistant professor in Information Security, Computer Engineering, University of Bologna, Bologna (Italy)**
- 2022/2024 Assistant professor in Computer Lab, Chemical and Biochemical Engineering, University of Bologna, Bologna (Italy)**
- 2021/2022 Assistant professor in Smart Services for Industry 4.0, Fondazione Alma Mater, Bologna, Bologna (Italy)**
- 2021/2022 Assistant professor in Fundamentals of Computer Science, Telecommunications Engineering, University of Bologna, Bologna (Italy)**
- 2019 Bit4id through Generazione Vincente, Napoli (Italy) – Software Engineer**
Business: Public Key Infrastructure, Technologies for Authentication, Digital Signature, and Cryptography
- Computer security project
 - Development of applications for digital authentication
 - Blockchain-based application development (Hyperledger)
 - Analysis of electronic voting system using blockchain

MAIN 5 PUBLICATIONS

Published 18 peer-reviewed articles in top journals and conference proceedings. The full list can be find at: <https://scholar.google.com/citations?user=91p3JBIAAAAJ&hl=it&oi=ao>

1. C. Mazzocca, A. Acar, S. Uluagac, R. Montanari, "EVOKE: Efficient Revocation of Verifiable Credentials in IoT Networks", 33rd USENIX Security Symposium, 2024,
2. C. Mazzocca, N. Romandini, R. Montanari, and P. Bellavista, "Enabling Federated Learning at the Edge through the IOTA Tangle", Future Generation Computer Systems, 2024.

3. N. Romandini, A. Mora, C. Mazzocca, R. Montanari, P. Bellavista, "Federated Unlearning. A Survey on Methods, Design Guidelines, and Evaluation Metrics", IEEE Transactions on Neural Networks and Learning Systems, 2024.
4. V. Casola, A. De Benedictis, C. Mazzocca, V. Orbinato, "Secure Software Development and Testing: a Model-based Methodology", Computer & Security, 2024.
5. C. Mazzocca, N. Romandini, M. Mendula, R. Montanari, P. Bellavista, "TruFLaaS: Trustworthy Federated Learning as a Service", IEEE Internet of Things Journal, 2023.

LANGUAGES

- **Italian** (Native)
- **English** (Proficient – C1) - Certificates: Hold First Certificate in English (FCE) issued in September 2014

REFERENCES AVAILABLE ON REQUEST