



Calogero Turco

Date of birth: REDACTED

Nationality: REDACTED

Gender: REDACTED

Contact

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calogero-turco-5097b8229

[GitHub caltr98](https://github.com/caltr98)

EDUCATION & TRAINING

2017 - 2021 Pisa, Italy

Bachelor of Computer Science University Of Pisa

Acquired a foundation of knowledge and skills in Computer Science topics.

As a Bachelor thesis, I developed a Privacy-Preserving system for package shipping using Self-Sovereign Identity (SSI). In doing so, I acquired knowledge of the concepts of Blockchain technologies. I learned to use the Hyperledger Indy SDK libraries to interface with the Indy Blockchain designed to work with SSI.

Level in EQF: EQF level 6 | **Thesis:** Privacy-preserving delivery with Self-Sovereign Identity - An implementation with Hyperledger Indy

30/11/2021 - 11/10/2024 Pisa, Italy

Master Degree in Computer Science ICT Solutions Architect University Of Pisa

Acquired knowledge related to Blockchain and Peer To Peer Systems. In particular, I learned the Bitcoin protocol, how to analyze blockchain transaction data and programming Ethereum Smart Contracts.

I also acquired knowledge of Microservices, Communication technologies, Datacenter, Docker, Compression, Algorithms, Parallel programming, Distributed systems, and Embedded systems

Final grade: 110 Cum Laude | **Level in EQF:** EQF level 7 | **Thesis:** Assessing the Trustworthiness of Social Content Through Self-Sovereign Identity

01/11/2024 - CURRENT Pisa, Italy

PhD Computer Science University Of Pisa

Currently researching and developing applications of Self-Sovereign Identity to real-world systems

Field(s) of study: Self-Sovereign Identity, Trust, Blockchain, Internet of Things , Online Social Network | **Level in EQF:** EQF level 8

PUBLICATIONS

2023

Self-Sovereign Identity for Privacy-Preserving Shipping Verification System

Paper published in ICBTA '22: Proceedings of the 2022 5th International Conference on Blockchain Technology and Applications. This work was based on my Bachelor's Degree Thesis and illustrates a system that exploits the concept of Blockchain-Based Self Sovereign Identity (SSI) for providing digital identity, trust, and privacy in the context of a Shipping Verification System in supply chain management. The paper provides a good system's performance evaluated on a private Hyperledger Indy blockchain network and a public Sovrin Foundation testnet

Authors: De Salve, Andrea and Lisi, Andrea and Mori, Paolo and Ricci, Laura and Turco, Calogero | **Journal Name:** 2025 7th International Conference on Blockchain Computing and Applications (BCCA) | **Publisher:** ACM

2025

An Aid to Mitigate Online Misinformation with Self-Sovereign Identity and ArtificialIntelligence

Paper published in BCCA'25: Proceedings of the 2025 7th International Conference on Blockchain Computing and Applications (BCCA). Work presented during the first year of my PhD, presenting an SSI and AI-based approach where authors attach verifiable credentials to social posts to prove expertise, improving content credibility and reducing misinformation.

Authors: C. Turco, A. D. Salve, D. D. F. Maesa, P. Mori and L. Ricci | **Journal Name:** 2025 7th International Conference on Blockchain Computing and Applications (BCCA) | **Publisher:** IEEE

2026

From Solo Issuing to an Orchestra: Design and Seamless Augmentation of Self-SovereignIdentity for Multi-Signature Verifiable Credentials

Design of a Multi-Issuer protocol for issuance and verification of Verifiable Credentials in Self-Sovereign Identity.

Poster presented at ACM SAC 2026..

2026

CERBERUS: A Self-Sovereign Identity-based Authorization Framework for Autonomous Vehicle

Devised an integration of Self-Sovereign Identity (SSI) with RoboTaxi for authorization checks for access in Limited Traffic Zones. Providing an augmentation of SSI with Multi-Holder Verifiable Presentation to allow the conjunct presentation of Verifiable Credentials by RoboTaxi and user of the service. Tests performed on Raspberry Pis representing the RoboTaxi and a Road Side Unit. *To appear*.

Authors: C. Turco, M D. Vincenzi, A. D. Salve, I. Matteucci, P. Mori and L. Ricci | Journal Name: IEEE VTC Spring 2026

Orchestrating Multi-Issuer Credentials in Self-Sovereign Identity: An Implementation with Proof of Ownership

Full implementation and testing of Multi-Issuer Verifiable Credential workflows from issuing to verification.

To appear.

Authors: C. Turco, A. D. Salve, P. Mori and L. Ricci | Journal Name: ISCC 2026

When Bitcoin Rolls the Dice: An Analysis of Gambling Patterns in SatoshiDice

A clustered Wallet level analysis of betting approaches (Flat Bet, Martingale, D'alembert) over SatoshiDice.

Paper presented at the 8th Distributed Ledger Technology Workshop. To appear in the proceedings.

C. Turco, G. Trudu, D. Di Francesco Maesa and L. Ricci

WORK EXPERIENCE

IEEE International Conference on Blockchain and Cryptocurrency Pisa, Italy

Local Organizing Committee Volunteer

02/06/2025 - 06/06/2025

- Registration desk
- Presentation set up
- Provided on-the-spot problem solving and crisis management

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

OTHER LANGUAGE(S):

English

Listening B2

Reading C1

Writing B2

Spoken production B2

Spoken interaction B2

SKILLS

PROGRAMMING LANGUAGES

Java | C++ | Javascript(Nodejs, ExpressJs) | C | Python | SQL | Haskell

TOOLS

Overleaf & LaTeX | GIT version control, Linux Command | Word/PowerPoint capabilities

SOFTWARE LIBRARIES

Keras | ScikitLearn | TensorFlow

DISTRIBUTED LEDGER / BLOCKCHAIN KNOWLEDGE

Decentralized identifiers (DIDs) | Hyperledger Indy | Veramo | Bitcoin | Solidity | Ethereum | Self Sovereign Identity

SYSTEM PROGRAMMING

POSIX Threads Programming | Parallel computing (OpenMP) | FastFlow

The statements herein are made under Articles 46, 47 and 76 of Italian Presidential Decree 445/2000. I authorize the processing of personal data in this CV under Article 13 of Legislative Decree 196/2003 and Article 13 GDPR 2016/679.