

Alexandru Andrei Colacel

Personal Profile

Graduated in Computer Science from "La Sapienza" University of Rome, with a strong passion for Software Development, Blockchain, and the Internet of Things. Since a young age, Computer Science has represented not just an interest, but a true vocation for me. Throughout my academic journey, I explored a wide range of subjects—from mathematical foundations to automata theory—always striving to combine theory with practical application. Particularly passionate about Cybersecurity Engineering, I have dedicated time to understanding the techniques and strategies required to ensure the security of IT systems. As a result, my thesis focused on the development of a Trusted Execution Environment (TEE) compatible with the Ethereum Virtual Machine (EVM), using technologies such as Solidity, Go, and Docker, with a specific emphasis on data privacy and security. I am currently working in IoT development, continuing to explore and deepen my understanding of cybersecurity within my projects.

Experience

Lutech S.p.A [�]

Rome, IT

IoT Software Engineer & Site Ambassador

October 2023 - Present

- Main Experience: Development of IoT software with a strong focus on bug fixing and designing efficient software solutions. Improved the performance of existing code and introduced new AWS components with a cost-optimization mindset.
- Managed Cybersecurity-related tasks, focusing on integrating security into development workflows and supporting the protection of cloud infrastructures.
- Actively served as a Site Ambassador, facilitating communication across teams, promoting local corporate initiatives, and contributing to company culture.
- Technical Skills: Python, AWS Cloud, AWS Lambda, ElasticSearch, AWS WebSocket, API Gateway, AWS DynamoDB, Linux tools, Scripting, Git, Jira, Confluence, BitBucket.
- Soft Skills: Teamwork, Time Management, Communication, Presentation skills.

Education

Master's Degree in Cybersecurity

Rome, IT

University "La Sapienza"

September 2024 - Ongoing

• **Courses:** Cryptography, Network Infrastructures, Distributed Systems, Statistics, Cyber and Computer Law, Ethical Hacking, Malware Analysis and Incident Forensics, Security Governance, Practical Network Defense, Secure Computation, Internet of Things, Blockchain and Distributed Ledger Technologies, Machine Learning.

Bachelor's Degree in Computer Science

Rome, IT

University "La Sapienza"

October 2020 - March 2024

- Thesis Title: TEE-based execution of Smart Contracts.
- **Courses:** Algebra, Algorithms, Computer Architectures, Automata Theory, Differential Calculus, Programming Fundamentals, Integral Calculus, Mathematical Logic, Operating Systems and Computer Networks, Probability Theory, Digital Systems, Compilers, Cybersecurity, Operating Systems, Java Programming, Computer Science Fundamentals, Software Engineering.

Skills_

Hard Skills Python (NumPy, OpenCV), AWS Serverless, C, Java, SQL, Shell (Bash/Zsh), Git, Markdown, YEX Soft Skills Time Management, Teamwork, Problem-solving, Documentation, Engaging Presentation

Languages _

Romanian Native proficiency
Italian Native proficiency

English Professional proficiency - B2

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.