

Duarte Mortágua

duarte.ntm28@gmail.com

Areas of interest

Malware Analysis, Digital Forensics, Access Control, Cryptography, Virtualized Systems, Networking.

Work

2023/06 – Now **CERT.PT – CNCS** – Lisbon, PT
Cybersecurity Engineer

Licenses and Certifications

2024/01 **GIAC Reverse Engineering Malware (GREM)** – Copenhagen, DK
Analyst Number [9276](#)

GIAC Advisory Board

Education

2021 – 2023 **University Of Aveiro** – Aveiro, PT
MSc in Cybersecurity

2018 – 2021 **University Of Aveiro** – Aveiro, PT
BSc in Informatics Engineering

Selected coursework

Security Law and Planning; Identification, Authentication and Authorization; Reverse Engineering; Applied Cryptography; Analysis and Exploration of Vulnerabilities

Technical skills

Cybersecurity

Reverse engineering skills regarding Windows malware, from scripts to binaries and shellcode.

Digital Forensic skills regarding acquisition and discovery in Windows systems, using tools such as FTK, Arsenal, KAPE, Volatility, Plaso, Timesketch and others.

Basic reverse engineering skills regarding Android apps.

Analysis, exploitation and assessment of vulnerabilities.

Familiar with Splunk and IntelMQ as part of operations in cybersecurity teams.

Participation in CTF Competitions:

- CyberSecurityChallengePT 2024 (ranked 4th/26)
- MetaRed International CTF 2022, 3rd stage Mexico (ranked 2/240 worldwide)
- MetaRed International CTF 2022, 2nd stage Portugal (as organizing team)
- NahamCon 2021 (ranked 8/6491 worldwide)
- Ciber Perseu 2020

Programming languages

Proficient in Python and Java. Familiar with C, Javascript, C# and PHP.

Software Development

Development Frameworks such as Django and Spring.

Small frameworks and technologies such as Flask, Apache Tomcat and Maven.

Data Persistence

SQL related systems (Microsoft SQL Server, MySQL).

NoSQL related systems (Redis, MongoDB, Apache Cassandra, Neo4j).

DevOps

Implementation of CI/CD Pipelines with Jenkins and GitHub Actions.

Infrastructure as Code (IaC) with Docker Compose (YAML).

Docker containers and Git version control familiarization.

Other

Tools, technologies and standards used: ANTLR4, AWS EC2, Assembly, Bootstrap, CSS, Celery, Ghidra, HTML, Jinja2, JSON, JUnit, Kanban, KVM, \LaTeX , Matlab, Mockito, POO, Python, Request Tracker, REST, RabbitMQ, SQL, UML.

Languages

Portuguese (native), English (fluent).

Talks

- 2024/06 Reverse Engineering de Scripts Maliciosos em Windows
C-Days 2024 - Coimbra, PT
- 2023/03 VPN user authentication using centralized Identity Providers
The Nineteen International Conference on Networking and Services (ICNS 2023) - Barcelona, Spain

Publications

- 2024/05 **Enhancing 802.1X authentication with identity providers using EAP-OAUTH and OAuth 2.0**
Duarte Mortágua, André Zúquete, Paulo Salvador
Computer Networks
DOI: [10.1016/j.comnet.2024.110337](https://doi.org/10.1016/j.comnet.2024.110337)
- 2023/03 **VPN user authentication using centralized Identity Providers**
Duarte Mortágua, André Zúquete, Paulo Salvador
The Nineteen International Conference on Networking and Services (ICNS 2023) - Barcelona, Spain.