# Alessio Santoru | Curriculum Vitae

## **Profile**

A Senior Product Security Engineer with a focus in offensive security and vulnerability research. A passionate security blog writer and part time bug hunter, equipped with a strong intercultural and interdisciplinary mindset.

## Work experience

## **Application Security Engineer**

Amazon Web Services, Milan

December, 2022 - Present

- Owned the Application Security Process for AWS Outposts and AWS Local Zones to launch more than 50 features across multiple Outposts and Local Zones products
- Defined and enforced requirements to operate AWS services in hardware located in facilities outside of company's control (Colocation or customer's location) and built automation for verification and detection
- Raised the bar across more than 5 EC2 services by driving API security improvements that uncovered authorization issues and logical bypasses

#### **Senior Product Security Engineer**

Trade Republic, Berlin

October, 2021 - October, 2022

- Established an end to end SSDLC process for new features built by the company, automating part of it through the development of ad-hoc platforms
- Defined per-service threat models and highest likelihood threats, risks and vulnerabilities to prioritize implementation of security controls by partnering with the engineering team
- Performed proactive research to detect new attack vectors and mitigate supply chain attacks in third party vendors used by the company

#### **Product Security Engineer**

N26. Berlin

November, 2019 - September 2021

- Ensured security of mobile and web applications and API by increasing coverage of threat modelling and penetration test activities
- o Developed internal tools to automate the security test processes around the mobile release program
- Safeguarded the systems through vulnerability research and penetration test activities of third party softwares
- o Implemented the Security Champions training to cover Security 101, Threat Modelling and OWASP Top 10

## **Security Consultant / Penetration Tester**

Horizon Security, Milan

April, 2017 - October, 2019

- Executed penetration test and vulnerability assessment on multiple platform and technologies (Web, Mobile Applications / Hardware and IoT devices)
- o Conducted reverse engineering activities of mobile applications iOS / Android
- Performed vulnerability research and responsible disclosure to vendors

## **Education**

#### **Bachelor of Computer Science**

Italy

Università degli Studi di Perugia

2017

Final mark: 110/110

## **Achievements**

CVE-2022-2903: PHP Objection Injection in WordPress Plugin (NinjaForms)

CVE-2018-20122: Remote code execution in Fastweb FASTgate router

CVE-2018-17172: Command injection in Xerox Altalink's web application

CVE-2018-7064: Cross-site scripting (XSS) Reflected in Aruba Instant web interface

CVE-2017-17663: Buffer overflow in mini\_httpd/thttpd

## **Public speaking**

2017: Real-time Auditing on macOS with OpenBSM

University of Utah, MacAdmins Meeting