

Andrea Valenza

PhD, Senior Software Security Consultant & Trainer



Professional Experience

- 2022 – present **Security Engineer, *Prima Assicurazioni***
- 2021 – 2022 **Senior Software Security Consultant, *IMQ Minded Security***
Penetration Testing and Training
- 2020 – 2021 **Software Security Consultant, *IMQ Minded Security***
Penetration Testing and Training
- 2020 **Penetration Tester, *CINI***
Vulnerability Assessment and Penetration Testing of the CyberChallenge.IT platform
- 2015 – 2017 **Research Grant Holder, *University of Genova***
Development of Techniques and Tools for Application Security Testing
- 2013 – 2015 **Freelance Web Developer**

Teaching Experience

- 2020 – present **Adjunct Professor of Functional and Security Testing Techniques, *University of Genova***
- 2018 – present **CyberChallenge.IT Instructor, *CINI***
Practical Security Fundamentals, Web Security, Access Control
- 2017 – 2020 **Security Trainer, *ZenHackAcademy***
Lessons and Meetings on practical security by the ZenHack CTF Team
- 2020 **Web Security Instructor, *Xelon Sinergetica***
- 2019 **Web Security Instructor, *RINA Academy***
- 2018 **Web Security Lecturer, *2nd-level Professional Master's Degree, StelMilit***
- 2017 – 2018 **Web Security Lecturer, *2nd-level Professional Master's Degree in Cyber Security and Data Protection***
- 2016 – 2018 **Computer Security Lecturer, *Master's Degree – University of Genova***
- 2016 – 2018 **Web Application Development Lecturer, *Bachelor's Degree – University of Genova***

Education

- 2017 – 2021 **PhD in Computer Science and Systems Engineering, *University of Genova***
Vulnerability Detection and Security Awareness
- 2015 – 2017 **2nd-level Professional Master's Degree in Cyber Security and Data Protection, *University of Genova***
- 2012 – 2015 **Master's Degree in Computer Engineering, *University of Genova***
- 2008 – 2012 **Bachelor's Degree in Computer Engineering, *University of Genova***

Publications

Never Trust Your Victim: Weaponizing Vulnerabilities in Security Scanners, RAID 2020 [↗](#)

Cross-Site Scripting Vulnerabilities in Security Scanners, including Rapid7 Metasploit Pro (CVE-2020-7354 and CVE-2020-7355)
[Blogpost] [Attacking the Attackers - https://avalz.it/research/metasploit-pro-xss-to-rce/](https://avalz.it/research/metasploit-pro-xss-to-rce/) [↗](#)
[Tool] [RevOK - https://github.com/AvalZ/RevOK](https://github.com/AvalZ/RevOK) [↗](#)

Damn Vulnerable Application Scanner, ITASEC 2021 [↗](#)

A Collection of Intentionally Vulnerable Security Scanners
[Repository] <https://github.com/AvalZ/DVAS> [↗](#)

WAF-A-MoLE: Evading Web Application Firewalls through Adversarial Machine Learning, SAC 2020 [↗](#)

A Search-based Methodology to Bypass ML-based WAFs

WAF-A-MoLE: An Adversarial Tool for Assessing ML-based WAFs, SoftwareX 2020

A Guided Mutation-based Fuzzer to Bypass ML-based Web Application Firewalls
[Tool] <https://github.com/AvalZ/WAF-A-MoLE> [↗](#)

A NERD DOGMA: Introducing CTF to Non-expert Audience, SIGITE 2020

An Entry-level CTF presented as an on-site and virtual Escape Room game

ZenHackAdemy: Ethical Hacking@ DIBRIS, CSEDU 2019

CTF-style Security Training within the ZenHackAdemy Initiative

Semi-automatic Generation of Cybersecurity Exercises: A Preliminary Proposal, EnSEmble 2019

Web security training [at] UniGe: an Experience, Programming 2019

Mobile App Security Assessment with the MAVeriC Dynamic Analysis Module, ASIACCS 2015

Certificates

Lead Auditor ISO/IEC 27001:2013

Interests

CTF

Co-founder and Trainer @ ZenHack CTF Team (<https://zenhack.it>)
Boeing-UNIGE CTF Organizer and Trainer (1st, 2nd, and 3rd edition)
Leonardo-UniGe Cybersecurity Scholarship Program Trainer (1st edition)
CyberChallenge.IT Trainer since 2018
ZenHackAdemy Organizer and Trainer

Taekwondo

2nd Dan black belt athlete, Referee, and Instructor @ A.S.D. Hwasong

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