# Andrea Valenza

# Software Security Consultant



## Education

- 2018–now **Ph.D. in Computer Science and System Engineering**, *University of Genoa*, Genoa, Italy.
  - Cyber Security Automation of web security testing and exploitation techniques
- 2015–2017 **Second-level Professional Master's Degree in Cyber Security and Data Protection**, *University of Genoa*, Genoa, Italy.
- 2012–2015 **Master's Degree in Computer Engineering**, *University of Genoa*, Genoa, Italy. DDoS Mitigation in Software Defined Networks
- 2008–2012 Bachelor's Degree in Computer Engineering, University of Genoa, Genoa, Italy.

# Teaching Experience

- 2018–now **CyberChallenge.IT Instructor**, *University of Genova*.

  Practical Security Fundamentals, Web Security, Access Control
- 2017–now **ZenHackAdemy**, *University of Genova*, Genova, Italy.

  Lessons and Meetings on practical security by the ZenHack CTF Team
  - 2020 **Instructor**, *Xelon Sinergetica*, Genova. Sicurezza delle applicazioni Web
  - 2019 **RINA Academy Instructor**, *RINA Academy*, Genova. Security Testing of Web Applications
- 2017–2018 Second-level Professional Master's Degree "Cyber Security and Data Protection", University of Genova.

  Web Security
  - 2018 **Second-level Professional Master's Degree**, *StelMilit*, Chiavari (GE), Italy. Web Security and Exploitation
- 2016–2018 **Computer Security**, *Master's Degree University of Genova*, Chiavari (GE), Italy. Web Security and Exploitation
- 2016–2018 **Web Application Development**, *Bachelor's Degree University of Genova*. Building secure web applications with modern technologies

# Job Experience

- 2020-now **Software Security Consultant**, *IMQ Minded Security*, Milano, Italy.
  - 2020 **VAPT CyberChallenge.IT**, *CINI*.

    Vulnerability Assessment and Penetration Testing of the CyberChallenge.IT platform

- 2015–2017 **Research Grant**, *CSecLab*, Genova.

  Techniques and Tools for Automatic Application Security Analysis
- 2014–2015 Web Developer, Genny Mobility SA, Savona.
- 2013–2015 Freelance Web Developer, Genova.

#### Certifications

2016 Lead Auditor ISO/IEC 27001:2013, KHC.

Information security management systems

## **Publications**

- [1] Andrea Valenza, Gabriele Costa, and Alessandro Armando. Never Trust Your Victim: Weaponizing Vulnerabilities in Security Scanners. In 23rd International Symposium on Research in Attacks, Intrusions and Defenses (RAID 2020), 2020.
- [2] Andrea Valenza, Luca Demetrio, Gabriele Costa, and Giovanni Lagorio. WAF-A-MoLE: An adversarial tool for assessing ML-based WAFs. *SoftwareX*, 2020.
- [3] Luca Demetrio, Andrea Valenza, Gabriele Costa, and Giovanni Lagorio. WAF-A-MoLE: Evading Web Application Firewalls through Adversarial Machine Learning. In *Proceedings of the 35th Annual ACM Symposium on Applied Computing*, 2020.
- [4] Luca Demetrio, Giovanni Lagorio, Marina Ribaudo, Enrico Russo, and Andrea Valenza. ZenHackAdemy: Ethical Hacking @ DIBRIS. In *Proceedings of the 11th International Conference on Computer Supported Education, CSEDU*, 2019.
- [5] Andrea Valenza. Web Security Training [at] UniGe: An Experience. In *Proceedings* of the Conference Companion of the 3rd International Conference on Art, Science, and Engineering of Programming, 2019.
- [6] Marina Ribaudo and Andrea Valenza. Semi-automatic Generation of Cybersecurity Exercises: A Preliminary Proposal. In Proceedings of the 2Nd ACM SIGSOFT International Workshop on Ensemble-Based Software Engineering for Modern Computing Platforms, 2019.
- [7] Alessandro Armando, Gianluca Bocci, Gabriele Costa, Rocco Mammoliti, Alessio Merlo, Silvio Ranise, Riccarto Traverso, and Andrea Valenza. Mobile app security assessment with the maveric dynamic analysis module. In *Proceedings of the 7th ACM CCS International Workshop on Managing Insider Security Threats*, 2015.

#### Interests

Taekwondo 2nd Dan Black belt athlete, referee, and instructor @ A.S.D. Hwasong

CTFs Co-founder and active member @ ZenHack CTF Team (https://zenhack.it), Boeing-UNIGE CTF Organizer (1st, 2nd, and 3rd edition), CyberChallenge.IT trainer