

EXPERIENCE

- **Sapienza University**

Security Researcher

Full Remote

June 2023 - Present

Received a research grant at DIET Department to continue the studies on security in programmable networks.

- Designed, implemented and tested an innovative framework for anomalies and attacks detection in network environments through log analysis using Python and Bash.
- Studying and defining system scenarios and technical requirements and specifications for a new communication protocol for satellite networks (in collaboration with European Space Agency).
- Discovered vulnerabilities and new attack methodologies through testing, static and dynamic analysis in network applications written in Java.

- **Bugcrowd**

Security Researcher

Full Remote

Nov. 2021 - Present

- **bugcrowd.com/edoardottt**: Successfully identified and reported 250+ security vulnerabilities in high-profile companies and U.S. Government offices, with a specialization in web applications.
- **CISA Competition**: Recognized for outstanding work by reaching second place at the Cybersecurity and Infrastructure Security Agency (CISA) 2021 Competition.

- **SeismoCloud**

Software Developer

Rome, Italy

Mar. 2020 - Oct. 2020

- **SeismoCloud EUD system**: Designed, implemented and secured an user-friendly End User Development system (Docker, NodeJS) to enable non-technical users to configure and control networks of IoT devices and online services (e.g. automate actions such as sending Telegram/Email messages and posting tweets through IoT devices data).
- **API development**: Resolved issues in the SeismoCloud REST API system (Golang) providing information on Sensors signalings, devices and users' data, as well as associated statistics.

EDUCATION

- **Sapienza University**

Master's Degree in Cybersecurity; 109/110

Rome, Italy

Oct. 2020 - May 2023

Dissertation: "Proposal and Investigation of a framework for Cross App Poisoning attacks detection in Software Defined Networks."

- **Sapienza University**

Bachelor's Degree in Computer Science; 103/110

Rome, Italy

Sept. 2016 - Oct. 2020

Dissertation: "Design and development of the End User Development system in SeismoCloud".

- **Fabio Besta Scientific High School**

Scientific High School Diploma; 71/100

Orte, Italy

Sept. 2011 - July 2016

TECHNICAL SKILLS

Software Development, Application and Network Security. Extensive knowledge of networks and networking protocols (TCP/IP, Routing, HTTP, DNS, DHCP, IPS, IDS, Firewall, Proxy).

- **Languages**: Python, Go, Bash, Java, C, Javascript, SQL, HTML and other C-family languages.
- **Technologies**: Linux (Local, VM and in Cloud), Windows, Git, GitHub Actions, BurpSuite, SAST and DAST, Metasploit, Nessus, Nuclei and other vulnerability scanners, Docker, MySQL, PostgreSQL, MongoDB, SQLite, VSCode, Wireshark, Postman.

AWARDS - CERTIFICATIONS - LICENSES

- **ICCA by INE**
Certified Cloud Associate ([ICCA Certificate link](#))
- **eWPT by eLearnSecurity (INE)**
Certified Web Application Penetration Tester ([eWPT Certificate link](#))
- **eJPT by eLearnSecurity (INE)**
Certified Junior Penetration Tester ([eJPT Certificate link](#))
- **Class B European Driving License**

PERSONAL PROJECTS

Open-sourcing since 2018, reached 9k+ stars on GitHub: github.com/edoardottt

- **scilla**: Information Gathering tool - DNS / Subdomains / Ports / Directories enumeration
- **cariddi**: Take a list of domains, crawl urls and scan for endpoints, secrets, api keys, file extensions, tokens and more
- **csprecon**: Discover new target domains using Content Security Policy.
- **lit-bb-hack-tools**: Little Bug Bounty and Hacking Tools.

SECURITY ADVISORIES

Discovered, reported and responsibly disclosed many undetected vulnerabilities in popular products (mainly with code reviews, but also testing, static and dynamic analysis): edoardoottavianelli.it/cve

LANGUAGES

- **Italian**: Native speaking.
- **English**: Middle-level speaking.

SCIENTIFIC PUBLICATIONS

- **Simplify Node-RED for End User Development in SeismoCloud**
Enrico Bassetti, Edoardo Ottavianelli, Emanuele Panizzi
<https://arxiv.org/pdf/2012.05637.pdf>