

EXPERIENCE

- **Sapienza University**

Security Researcher

Full Remote

June 2023 - Present

Received a research grant at the Department of Information Engineering, Electronics and Telecommunications to continue the studies on attacks detection in virtual programmable network environments.

- Designed, implemented and tested an innovative framework for anomalies and attacks detection in network environments through log analysis using Python and Bash and new attack methods using network applications written in Java.
- Studying and defining system scenarios and technical requirements for a new secure and efficient communication protocol for satellite networks (in collaboration with ESA).

- **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.

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.

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**

SECURITY ADVISORIES

Discovered, reported and responsibly disclosed many undetected vulnerabilities in popular products (mainly with code reviews): 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>