



Ignazio Leonardo Calogero Sperandeo

Date of birth: 15/03/2007

Nationality: Italian

Contact

📍 Via Bergamo, 66, 90127,
Palermo, Italy (**Home**)

✉ ignazioandsperandeo@gmail.com

📞 (+39) 3913239367

🌐 jimbug.xyz

🌐 github.com/jim-bug

🌐 www.linkedin.com/in/ignaziosperandeo



europass

ABOUT ME

I'm a Computer Engineering student specializing in cybersecurity. I like to have a complete view of systems, from individual components to the infrastructure that connects them, because problems often arise at the points where they meet. I learn mostly by doing. When I study a topic, I put it into practice right away: I build projects, experiment, solve CTF challenges, and publish my work on GitHub. It's not enough for me that something works; I want to understand what happens underneath, and that's often where I find the details that make the difference. This approach drives my interest in the layers below software: electronics and telecommunications, from how devices work to how signals are transmitted. I consider these skills essential both for hardware-level security and for system design, and I've applied them in several IoT and home automation projects. I'm active in technical communities, where I help solve problems and share my work, and I take part in industry events, including as an exhibitor presenting projects and ideas for discussion. I'm particularly interested in the relationship between artificial intelligence and security, both as a defensive tool and as a new source of threats. I take my commitments seriously, work well in teams, and value building strong professional relationships.

My goal is to work where cybersecurity meets national security: protecting critical systems and infrastructure in a landscape where AI is changing both how attacks are carried out and how we defend against them. That's why I want to master both sides of the discipline, learning to think like an attacker in order to defend better.

EDUCATION & TRAINING

20/09/2020 - 30/06/2025 Palermo, Italy

● **Technical High School Diploma – Computer Science and Telecommunications** I.T.S.T. "Vittorio Emanuele III"

Field(s) of study: Inter-disciplinary programmes and qualifications involving Information and Communication Technologies (ICTs) | **Final grade:** 100/100 |

Level in EQF: EQF level 4

21/09/2025 - **CURRENT** Palermo, Italy

● **Bachelor's Degree in Computer Engineering** University of Palermo (Università degli Studi di Palermo)

Field(s) of study: Information and Communication Technologies (ICTs) not further defined | **Level in EQF:** EQF level 6

SKILLS

NETWORKING

TCP/IP | VLANs Configurations | Software-Defined Networking | Routing and switching | IPv4 | Routing protocols (BGP, OSPF, ISIS, EIGRP, RIP, MP-BGP) | network automation | virtualization | Cisco IOS | Wireless and WAN technologies

HARDWARE & IOT

IoT (ESP32) | electronics | ESP8266 IoT | telecommunications | Arduino & Raspberry Pi | maintain computer hardware | microcontroller

programming

OPERATING SYSTEMS & TOOLS

Linux (Ubuntu, Mint, Parrot, Kali) | Docker Container Architecture | Cloudflare | LaTeX (Basic) | Windows (10, 11) | manage ICT virtualisation environments | tools for software configuration management | Git | Github | CISCO Packetracer | LaTeX

OFFENSIVE SECURITY AND TOOLS

Experience in CTF | Wireshark | Tcpdump | web application security threats | Netcat | Burp Suite | Nmap

NETWORK AND SYSTEM SECURITY

Network Maintenance and Troubleshooting | security threat mitigation | Linux network and server administration | Linux Firewall | secure protocols (SSH, TLS/HTTPS, SFTP) | Apache HTTPD, Nginx, Tomcat

PROGRAMMING

C | Bash shell script | MySQL | C++ | R | PHP | Swift (SwiftUI, SpriteKit, Core ML, iOS development with Xcode) | JavaScript | SQL | Python | Java

SOFT SKILLS

conduct public presentations | manage teamwork | Challenge-Based Learning | Public Speaking and public relations | teamwork principles

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

OTHER LANGUAGE(S):

English

Listening B1

Reading B2

Writing B1

Spoken production B1

Spoken interaction B1

PROJECTS

22/06/2026 - 28/06/2026

● Pool-Pomp-Control

IoT system for the remote automation and monitoring of a pool pump, developed in C++ on a microcontroller platform, covering both the hardware setup and the control software.

Link <https://github.com/jim-bug/Pool-Pomp-Control>

15/08/2024 - 25/08/2024

● Particular Power Strip

ESP32-based home automation system that controls four power outlets through an HTTP server. Presented at Linux Meeting 2024 in Palermo (Version 1).

Link <https://github.com/jim-bug/Particular-Power-Strip/tree/pps-v2>

04/01/2024 - 07/06/2024

● calcIP

Python tool that analyzes an IPv4 address and its CIDR mask and performs subnetting and supernetting, designed to automate IPv4 addressing plans for router configuration.

Link <https://github.com/jim-bug/calcip/tree/main>

HONOURS AND AWARDS

08/03/2025 CINI Cybersecurity National Lab

● **OliCyber.IT 2025 – Italian Cybersecurity Olympiad**

Admitted to the regional phase of the national cybersecurity competition for high school students, based on CTF-style challenges.

04/12/2025 Stato Maggiore della Difesa

● **CyberChallenge – Italian Defence General Staff**

Participated in the cybersecurity competition organized by the Italian Defence General Staff, solving CTF-style challenges.

12/05/2026 Cisco Networking Academy

● **Cisco Cybersecurity Scholarship 2026**

Selected for the Cisco Cybersecurity Scholarship, an intensive CyberOps-focused program including Network Defense and Cyber Threat Management, with hands-on labs and industry webinars.

CONFERENCES & SEMINARS

02/05/2025 - 06/05/2025 Palermo

● **Web Security Seminar – Speaker**

Invited by my Computer Science teacher, I co-held with a classmate a 4-hour seminar on web application security for students, covering SQL injection, XSS, directory traversal and cookie poisoning, demonstrating mitigations in PHP and designing hands-on exercises.

Link

<https://github.com/jim-bug/school-coding/blob/master/Php/flipped-exercise/websecurity-flipped-SpataSperandeo.pdf>

29/03/2025 - 29/03/2025 Palermo

● **Linux Meeting 2025 – Speaker**

Presented a Capture the Flag challenge to attendees.

Link <https://www.youtube.com/live/OYwEbtHJhRE?si=EJa3qXXqu410vhyZ&t=2567>

22/03/2025 - 22/03/2025 Palermo

● **Arduino Day 2025 – Speaker**

Presented personal electronics and IoT projects to attendees.

Link <https://www.youtube.com/live/nrYmIQKzGc8?si=71ZdroOfM46XYyvt>

13/04/2024 - 13/04/2024 Palermo

● **Linux Meeting 2024 – Speaker**

Presented Particular Power Strip, an ESP32-based home automation system.

Link https://www.youtube.com/live/-w9tLKBHKK4?si=Bs0T8_vA674TMXq6&t=575

28/10/2023 - 25/10/2025 Palermo

● **Linux Day 2023, 2024, 2025 – Attendee**

Attended the annual event dedicated to GNU/Linux and open source software organized by Free Circle.

CERTIFICATIONS

University of Palermo, 03/03/2026

● **Apple Foundation Program**

Intensive program based on the Challenge-Based Learning methodology. Developed an iOS application in a team using Swift, SwiftUI and Xcode, from concept to prototype.

Mode of Learning Project Based

Link <https://bestr.it/award/show/ghRmHgKXRw20zrdHq1broA>

CINI Cybersecurity National Lab, 01/03/2025

OliCyber.IT Training Camp

Intensive cybersecurity training covering offensive and defensive techniques through hands-on CTF challenges, including network analysis, web security and cryptography.

Mode of Learning Presential

Cisco Networking Academy, 03/09/2025

CCNA: Enterprise Networking, Security, and Automation

Mode of Learning Online

Link https://www.credly.com/badges/ec31d57a-f6bb-4ecb-a90a-7824fc59dba9/public_url

Cisco Networking Academy, 24/05/2025

CCNA: Switching, Routing, and Wireless Essentials

Mode of Learning Hybrid

Link https://www.credly.com/badges/73360a0c-c9da-40e2-a7fe-a7e2a7e236b7/public_url

Cisco Networking Academy, 04/06/2024

CCNA: Introduction to Networks

Mode of Learning Hybrid

Link https://www.credly.com/badges/86fcdc36-afd2-478d-95cc-1d4e7f724a1b/public_url

FORIT, 17/12/2024

Workplace Health and Safety – General Training

Mode of Learning Online

OpenEDG Python Institute, 21/07/2023

PCAP – Certified Associate Python Programmer

Mode of Learning Online

Link <https://edube.org/certificates/verify/56H9.QgJs.3gY8>

Cisco Networking Academy, 26/05/2023

IT Essentials 7

Mode of Learning Hybrid

Link https://www.credly.com/badges/fb6c2209-49dd-4eac-953b-5b509f88d8f9/public_url