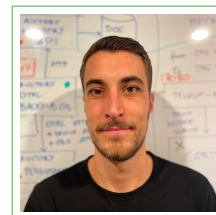# Carlo Ramponi

*Curriculum Vitae*

*Trento, Italy*
✉ *carloramponi1999@gmail.com*
🖥 *carloramponi.github.io*

*Everything should be made as simple as possible, but not simpler. -Albert Einstein*

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## Education

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|---|---|
| 2021–2023 | **Master Degree**, *Università degli studi di Trento*, Trento, *110 cum laude/110*. |
| | Computer science, Cybersecurity |
| | I did my thesis during an internship at Quarkslab, about *Diving into Starlink's User Terminal*. |
| 2018–2021 | **Bachelor Degree**, *Università degli studi di Trento*, Trento, *110 cum laude/110*. |
| | Computer science |
| | I did my thesis in collaboration with the Police of Trento, the goal was to analyze a counterfeit tachograph and find a way to easily detect that kind of modification during road inspections. |
| 2013–2018 | **High school degree**, *Istituto tecnico C. A. Pilati*, Cles, *97/100*. |
| | High school degree in Information technology |

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## Experience

### Work experiences

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|---|---|
| 2022–2023 | **Front end developer**, *TxC2 s.r.l.*, Trento. |
| | I was in charge of the development of the front end of a web application that lets students to watch lecture recordings in a smart way. |
| | Check it out: `https://txc2.eu/` |

### Internships

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|---|---|
| 2023 | **Security researcher**, *Quarkslab*, Paris, France. |
| | During my Internship at Quarkslab, I focused on analyzing the User Terminal of a satellite internet provider (Starlink). I employed reverse engineering techniques to understand its internal operations and to research possible vulnerabilities. I've also published a blog post about my research: `https://blog.quarkslab.com/starlink.html` |
| 2020 | **Mobile app developer**, *Fondazione Bruno Kessler*, Trento. |
| | During 2020's summer I worked as an intern at FBK, I was assigned the ideation and creation of an open source mobile application that would help amateur volleyball coaches keeping track of training sessions. |
| | Here is the link: `https://github.com/CarloRamponi/TrainingStats` |
| 2017 | **Mobile game developer**, Cles. |
| | I joined a team with the goal of developing a cross platform Mobile game, we used cocos2d-x open source framework. The game is now available for download on both Google Play Store and Apple App Store [`https://drenlab.page.link/Drenlab`]. See Drenlab section. |

| | |
|---|---|
| 2016 | **Network administrator**, *Presidio informatico Cles*, Cles. |
| | I joined the network administrator of the school. |
| | Some activities: |
| | ○ Reconfiguration of the School network (Windows server, domain, shared directories); |
| | ○ Windows/Linux clients configuration. |

### Drenlab

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|---|---|
| 2019–Present | **Drenlab s.r.l**. |
| | Drenlab is a start up that was created by me and a friend of mine with the aim of delivering the game we were developing and also other products like websites and apps. |
| | Here is the website: `http://drenlab.com` |
| | Here are some of our works: `https://onemoreday.io` (commissioned), `https://www.4drink.it` (commissioned), `https://hotelmenu.it` |

### Competitions

| | |
|---|---|
| November 2023 | **WPCTF**, *Würth Phoenix*, Bozen. |
| | I was part of the team that got the 2nd place in the second edition of the WPCTF. |
| November 2022 | **WPCTF**, *Würth Phoenix*, Bozen. |
| | This was a classic Jeopardy style Capture the Flag, I was part of the team that got the 2nd place. |
| June 2020 | **CyberChallenge**, *Università degli studi di Trento*, Trento. |
| | During 2020's spring I attended the CyberChallenge lessons that lead to the local competition which I won. The competition consisted of several "challenges" in which I had to find a phrase (the flag) using cybersecurity skills in several fields. (e.g. software security, network security, ecc.) |
| November 2019 | **NOI Hackathon SFScon Edition**, *NOI Techpark*, Bozen. |
| | My team won the Infominds challenge with a cross platform app: "Room Tracker" `http://hackathon.bz.it/project/roomtracker`, here is my profile: `http://hackathon.bz.it/user/carlo-ramponi` |

### Education experiences

| | |
|---|---|
| 2021-2022 | **Cyberchallenge**, *Università degli studi di Trento*, Trento. |
| | The year after I've completed my training at Cyberchallenge I joined the training team at University of Trento, where I was responsible for the laboratories on Reverse Engineering and Binary exploitation. |
| Fall 2021 | **Tutor**, *Università degli studi di Trento*, Trento. |
| | During fall 2021 I started my path as a tutor at University of Trento. I was responsible for the tutoring of Calculus 1 and Numerical Analysis. |

## Languages

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| Italian | Mother-language |
| English | B2 |
| French | A2 |

## Technologies

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|---|---|
| Desktop | C/C++, Java, Python, Rust |
| Scripting | Bash, python |

| | |
|---:|:---|
| Server-side | PHP, Nodejs, Docker, Kubernetes |
| Client-side | Javascript, Typescript, React |
| Mobile | Flutter (dart), Cocos2d-x (C++) |
| Security | Reverse Engineering, Binary Exploitation, Cryptography, Hardware analysis, Fuzzing |