

# Simone Aronica

## Gameplay Developer

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 simonearonica  xNicklaj  Nicklaj

## EDUCATION & TRAINING

<b>Master's Degree in Cinema and Digital Media Engineering</b> Politecnico di Torino 	22/09/2024 – Current   Turin, Italy
<ul style="list-style-type: none"><li>Core courses: <b>Virtual Reality, Game Design</b>, Computer Animation, Audio Sampling, Digital Audio Processing, <b>User Experience Design</b>, Digital Interaction Design.</li><li>Winner of the <b>merit scholarship</b> granted by EDISU Piemonte for the <b>entire academic path</b>.</li></ul> <p>Current avg. grade: 27/30.</p>	
<b>Bachelor's Degree in Computer Engineering</b> Politecnico di Torino 	20/09/2020 – 08/12/2025   Turin, Italy
<ul style="list-style-type: none"><li>Core courses: <b>Algorithms</b> and data structures, Operating Systems, <b>Computer Networks</b>, Introduction to <b>Web Applications</b>, Object Oriented Programming, Introduction to <b>Databases</b>, Computer Architecture.</li><li>Winner of the <b>merit scholarship</b> granted by EDISU Piemonte for the <b>entire academic path</b>.</li></ul>	
<b>High School Diploma as IT Technician</b> Technical Institute Majorana 	2015 – 2020   Palermo, Italy
Core knowledge: Software Development Principles, C, Java, PHP, Project Management, Computer Networks.	

## PROJECTS

### Domande?

A **digital experience** aimed at making the user ponder and reflect about its role in society.  
Made in three months by a team of four people where I acted as **lead developer** and **tool designer**.  
This project was made for the course of Virtual Reality.  
Personal writeup available on portfolio.simonearonica.me .

### Casino Survivors

A **videogame** prototype for a top-down 2D shooter that offers a three-players online **multiplayer** experience.  
Made in two weeks by a team of three people where I acted as **lead game designer** and **lead programmer** for the **networking** stack.  
This project was made for the **Play Again Game Jam** hosted by **LevelupLab**, the videogame development team in PoliTO.  
Personal writeup available on portfolio.simonearonica.me .

### Butter

A **Unity library** that offers built-in save data serialization, **save and load** mechanics, a **game event** management system and custom data tools via the **Scriptable Object Architecture**.  
Personal writeup available on portfolio.simonearonica.me .

## OTHER EXPERIENCES

<b>Member of IEEE-HKN Mu Nu Chapter</b> 	2025 – Present
<ul style="list-style-type: none"><li>Member of the italian chapter of the <b>honor society</b> IEEE-HKN.</li><li>In the communication area, I've been creating multiple <b>media content</b> and refining my skill in design, communication and creative arts.</li></ul>	
<b>Torino Film Industry</b> 	2024 – Present
<ul style="list-style-type: none"><li><b>Technician and technical area manager</b> for the Virtual Reality rooms.</li><li>Reception and attendance of over 200 guests spread through 6 days.</li></ul>	

## Cyberchallenge.it

2021

During the cyberchallenge.it  national **capture-the-flag tournament**, disputed by around 40 universities:

- Participated as **finalist** in a team of six people.
- As a team, **finished second** in the competition.

## Pwnthem0le

2021 – 2022

During my membership at the pwnthem0le  student team in PoliTO:

- Participation in different capture-the-flag **competitions**.
- Developed some capture-the-flag **challenges** for the m0lecon CTF.
- Development and redesign of **internal web infrastructures** and **public website** for the **m0lecon CTF** .
- Public speaking for a **web security and penetration test workshop** at PoliTO in front of about 200 students.

## SKILLS

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### Software Development

- **Coding:** Python, Java, C, C++, C#, Go, Java, Kotlin, MATLAB, Bash, MIPS32 ASM
- **Mobile:** Jetpack Compose.
- **Web Development:** HTML, CSS, Javascript, Typescript, PHP, ExpressJS, Flask, Joomla, NodeJS, GatsbyJS.
- **Databases:** SQL, NoSQL, MongoDB.
- **Tools:** Linux, Docker, Git.
- Various: UML, ER Diagrams, Code Design Patterns (GOF, SOLID), Atlassian Trello, LaTeX.

### Game Development

- **Game Engines:** Unity, Unreal Engine
- **Game Design:** Principles of game design and videogame prototyping.
- **Project Marketing:** Realization of videogame trailers and pitch documents.
- **Gamification:** Design of gamified experiences and serious games.
- **Virtual Reality:** Knowledge of different types of input / output devices and tracking systems for virtual reality.

### Cybersecurity

- **Attack knowledge:** Man-in-the-middle, Sniffing, Spoofing, DDoS, SQL Injection, Session Hijacking, Buffer Overflow, Template Injection, Request Forgery, Oracle Attack.
- **Tools:** Ghidra, Wireshark, Packet Tracer, Burp Suite.
- Various: Reverse engineering, Binary Exploitation, Cryptography.

## CERTIFICATES

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### Cyberchallenge.it

- Training program in **ethical hacking** of 150h over four months.

### Cisco

- Cisco CLA - **C Programming**
- Cisco - Intro to **Packet Tracer**
- Cisco - **Cybersecurity** essentials

## LANGUAGE SKILLS

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Italian – Native | English – IELTS 7.5 (Advanced)