

Francesco Bianchi

Trento (Italy) | bianchif037@gmail.com | (+39) 348 836 5228 | LinkedIn | GitHub | Portfolio

EDUCATION

University of Trento (UNITN) Master of Science in Computer Science (Cybersecurity track)	Sep 2025 – Present <i>Trento, Italy</i>
University of Milan-Bicocca Bachelor of Science in Computer Science – Final Grade: 104/110	Oct 2022 – Jul 2025 <i>Milan, Italy</i>
High School: Liceo delle Scienze Applicate “Sottotenente di Vascello Antonio Badoni” Applied Sciences specialization	Sep 2017 – Jul 2022 <i>Lecco, Italy</i>

EXPERIENCE

Internship – Research Thesis Project University of Milan-Bicocca	Mar 2025 – Jul 2026 <i>Milan, Italy</i>
<ul style="list-style-type: none">Designed and implemented an automatic evaluation system for LLM responses, classifying outputs as jailbreak or non-jailbreak.Fine-tuned a BERT-based classifier on a curated dataset of 1,784 labeled instances, improving robustness and accuracy over baseline models.Integrated unsupervised clustering (K-means) to explore semantic patterns and latent structures in LLM responses.Built a modular and containerized software architecture in Python, ensuring reproducibility and portability.Conducted extensive validation with visualization techniques (PCA, t-SNE, UMAP) to analyze clustering quality and semantic separation.Contributed to a broader AI security research project at the Department of Informatics (DISCo), focusing on alignment and jailbreak resilience.	
Assistant Technician (Part-time) Pitek	Jun 2021 – Oct 2021 <i>Lecco, On-site</i>
<ul style="list-style-type: none">Assisted with IT infrastructure management for client companies.Monitored and maintained servers and network systems to ensure proper functionality.Provided on-site support for customers, troubleshooting issues and ensuring service continuity.	

PROJECTS

Portfolio Website Personal Project	Jan 2025 – Present <i>Milan, Remote</i>
<ul style="list-style-type: none">Built a responsive portfolio website using Next.js, TypeScript, and Framer Motion.Designed with a minimalist, Swiss-inspired aesthetic emphasizing typography and smooth animations.Optimized loading times and implemented SEO best practices for better visibility.Developed mobile-first responsive layouts to ensure cross-device compatibility.	
SmartHome IoT Simulator University of Trento (Service Design Course)	Oct 2025 – Jan 2026 <i>Trento, On-site</i>
<ul style="list-style-type: none">Co-designed and developed a smart home IoT simulator based on a microservices (SOA) architecture.Built the backend using Python 3 and Flask, exposing RESTful APIs for seamless cross-layer communication.Containerized and orchestrated the multi-container environment using Docker and Docker Compose to ensure scalability and isolation.Implemented real-time anomaly detection algorithms (e.g., smoke alerts) and energy efficiency optimization logic.Integrated MongoDB for robust data persistence and interfaced with external APIs (Telegram Bot, OpenWeatherMap) to power a monitoring Web Dashboard.	
Ignition Finance Android App University of Milan-Bicocca	Nov 2024 – Feb 2025 <i>Milan, Hybrid</i>
<ul style="list-style-type: none">Built an Android app using Kotlin and Jetpack Compose, focusing on performance and usability.Developed a simulation engine capable of processing 1,000 runs of 100 years of market data in 7 seconds.Implemented interactive visualizations for portfolio analysis with dynamic graphs and charts.	

- Integrated Firebase for authentication and data persistence.
- Worked in a multidisciplinary team to deliver a scalable and well-tested product.
- Awarded top marks by the supervising professor.

Domains Web App

University of Milan-Bicocca

Jun 2024
Milan, Hybrid

- Designed and developed a full-stack platform for domain registration, renewal, and reacquisition.
- Implemented REST APIs with Java, Maven, Jetty, and Jersey to manage transactions and users.
- Built a document-based database using HashMap collections for efficient data handling.
- Created a responsive front-end with HTML, CSS, and JavaScript from Figma designs.
- Ensured smooth client-server interaction with a custom CORS filter.
- Delivered the solution in collaboration with a multidisciplinary team under tight deadlines.

Prolog and Lisp Object-Oriented Extensions

University of Milan-Bicocca

Nov 2023 – Jan 2024
Milan, Remote

- Extended Prolog and Lisp with OOP features such as inheritance, fields, and methods.
- Ensured type consistency for reliable data management.
- Completed within strict deadlines, showcasing strong time management and teamwork.

Dsh.C – A Simple Shell in C

Personal Project

Dec 2023 – Jan 2024
Milan, Remote

- Implemented a Unix shell in C supporting path management, redirection, and piping.
- Executed commands via search paths and allowed dynamic path setting.
- Supported output redirection (*i* and *i i*) and piping (*—*).
- Designed as an educational project using `sys/wait` in a Linux environment.

SKILLS

UI/UX & Tools: Figma, Adobe InDesign, Git, Design Systems

AI: LLM input manipulation, jailbreak techniques

Programming: Java, Kotlin, Python, Julia, SQL, REST APIs, JavaScript, Prolog, Lisp,

Languages: Italian (Native), English (C1)