

# Giacomo Romanini

## EDUCATION

2022-JULY 2025

Università di Bologna, highest mark in  
**Master in Computer Engineering**

- Scalable and Reliable Services: best practices and approaches over cloud technologies. Project to design a scalable architecture on Azure
- Software Systems Engineering: analysis and development organized in sprints.
- Processors: pipeline and out-of-order execution on modern processors.

**Erasmus** at Vilnius' VGTU:

- Intelligent Systems: FNN, training and backpropagation.
- IoT: project involving microcontrollers and server communication for low energy systems.

2018-2022

Università di Bologna

**Bachelor in Computer Engineering**

- Software Engineering: requirements, use cases and risk analysis to define the problem and create the architectural model. Definition of ER domain, class structure, and test cases.
- Operating Systems: coordination of processes and tasks in a time and memory sensitive environment.

2013-2018

Liceo Ettore Majorana, San Lazzaro di Savena (BO)

**High School of Applied Sciences**

Scientific specialization with programming lessons

## WORK EXPERIENCE

MAR 2021 - FEB 2024

Luna Srl, Bologna

**Junior Developer**

- Developed programs and applications, defining processes flows and use cases.
- Maintenance of a web-browser management app. Resolved issues with orphaned many-to-many relationships and deleted references. Reduced by 66.7% the initial loading time, and halved some data retrieval time by optimizing SQL queries.

APR 2017 - JULY 2017

123FATTO, Pianoro

**Technical Support**

Hardware and Software analysis and testing to build, repair and optimize clients' computer.  
Store management and clients relations.

MAY 2016 - JUNE 2016

ANT Italia, Bologna

**Internal Technical Support**

Hardware and Software maintenance and support, collaborating with technicians and associates to solve office stations' and server's problems.

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✉ <https://github.com/RedDuality/>

## PROJECTS

ACTIVE **WYD (Website)**

Scalable event-sharing app with automatic media retrieval.

**Front End (GitHub)**

Flutter interface for sharing and confirming events, with automatic media retrieval from the device and real-time/long-polling updates.

**Back End (GitHub)**

Stateless REST server with sharded MongoDB, MinIO object storage and message queue for update propagation.

2025 **B. Future Challenge**

Collaborated in an interdisciplinary team to design a concept AI-driven analytics assistant, developing the data infrastructure.

2024 **Forward for Snitch (GitHub)**

Parallelized LLaMA 2s forward function on a RISC-V 8-core Spike CPU.

2023 **Intelligent Systems (GitHub)**

Designed and trained neural networks for intelligent system applications.

2023 **Virtual-Robot (GitHub)**

Developed an actor-based software engineering project simulating robotic behaviors.

2021 **Farmabyte (GitHub)**

Conducted problem analysis and implemented solutions in a software engineering project.

## SKILLS

TECHNICAL Java, Spring, C#, C, Go, Angular, Flutter, React, SQL, MongoDB, git, Docker, Arduino, MATLAB

ORGANIZ. Agile, Process Design, Strategy Dev., Nonviolent Communication, Coordination

LEARNING Security, DevOps, Kubernetes, game development, photo editing

ADDITIONAL Italian C2, English C1, Category B driving licence (Italy), Scout leader, Guitar