DESIREE MANICARDI

Ph.D. in *Computer Science and Computational Mathematics*

@ desiree.manicardi@gmail.com   📍 near Busto Arsizio (Varese), Italy   🌐 dmanicardi.github.io

in desiree-manicardi-25a654168/   🔘 dmanicardi   Last updated on 2025/09/29

SUMMARY

- ◆ Bachelor's and Master's degrees in *Computer Science* (CS) + Ph.D. in *Computer Science and Computational Mathematics*.

- ✒ 4+ years of experience in academia, focusing on *modelling biological systems* in **Python** – code available on 🔘 dmanicardi

- 🖥 15+ projects at university (further information here): 8 considering sw requirements and UML, 2 using JavaScript and 2 using SQL.

- 👨‍🏫 20+ attended CS courses in the past 4 years, while several courses in *computer engineering* and *requirements analysis* during my Master's degree.

- 🖥 Some certifications such as:
  - "Data Access in C# and .NET Core";
  - "Asynchronous Programming with JavaScript".

- 👩‍💻 Since December 2023, I have been managing my website using *HTML*, *CSS*, *Bootstrap*, and *JavaScript*.

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- 🇮🇹 Italian: native.

- 🇬🇧 **English**: *Upper-Intermediate level*: FCE Certificate (CEFR B2) & PhD in English & Scientific Papers & Speaker @ ICTCS 2023.

CS SKILLS *selected*

Mainly used:

| Java | Python | SQL | NoSQL |

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Used for projects and courses:

Programming: C; C++; C#
Programming technique: OOP; real-time
Web: HTML; PHP; CSS; Bootstrap; JavaScript; AJAX
Database: PostgreSQL; MySQL; PHPMyAdmin; MongoDB
Diagrams : ER; UML; KAOS; Problem Frames
Formats : JSON
IDEs & platforms : Eclipse; GitHub; Node.js; Android Studio; ArduinoUNO
Tools: pgAdmin; Node-RED
SO: Linux; Windows

HOBBY

Genealogy Tree (already since 1768) 🌳 & Learning Turkish (CEFR A1) 🇹🇷

FOR FURTHER INFORMATION

See my my website or scan the QR code:

CURRENT POSITION

Didactic Tutor for the course *Didattica dell'Informatica* | University of Milan-Bicocca

📅 04 2025 – now   📍 Milan, Italy

EDUCATION

Ph.D. in *Computer Science and Computational Mathematics* | University of Insubria

📅 11 2020 – 05 2024   📍 Como, Italy

- Thesis: *Formal Models for Biological Systems*.
- I focused my research on *formal models for biological systems*. I mainly worked on a model to formalise a process algebra. It is user-friendly, easy to implement, and tailored for modelling *biochemical reaction networks*. The main contribution is related to the study of the *robustness* of biochemical networks.
- Main courses (in English): *Bioinformatics, IoT, Cryptography, Modeling and Verifying Hybrid Systems*.
- Camp: *Innovation Camp for PhD Students – Deep Dive Into Innovation and Execution* (03-05/2021, in English).

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Master's degree in *Computer Science* | University of Insubria

📅 12 2016 – 07 2018   📍 Varese, Italy

- Thesis: *Modelling a Dual Chamber Pacemaker in Span(Graph)* (in Italian), 110/110 cum laude.
- Main courses: *Software Engineering, Requirements Engineering, Programming in Java and C, Models of Computation, Models for Biological Systems, Privacy and Security, Artificial Intelligence*.

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Bachelor's degree in *Computer Science* | University of Insubria

📅 09 2013 – 12 2016   📍 Varese, Italy

- Thesis: *Design and development of an application for filtering Twitter messages*, 101/110.
- Main courses: *Database, Privacy and Security, Coding theory, Programming in Java, Software Design, Web applications*.

WORKING EXPERIENCE

Recognised Researcher | University of Insubria

📅 03 2024 – 02 2025   📍 Como, Italy

- Research Title: *Specification and analysis of behavioural differences in biomedical systems*.
- PRIN 2022 Project: *MEDICA: Modelling and vErification of alkaptonuria and multiple sclerosis Driven by biomedICAl data*.
- Programming languages: *Python* and mainly *Java*.
- See the website *here*.

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Traineeships | University of Insubria

- (11 2017 – 05 2018) Analysis of the Span-Cospan(Graph) formalism, focusing on timing.
- (02 2016 – 09 2016) Design and development of a web application aimed at filtering tweets using Twitter API.

TEACHING EXPERIENCE

Experience in *delivering* **Python** *and* **Java** *laboratory lectures* for Bachelor's and Master's students, in **Italian**. I am currently a didactic tutor.