# EDOARDO OLTOLINI

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#### **EDUCATION**

# University of Milan-Bicocca

October 2023 - t.b.d

M.S. in Computer Science Average Grade: 29

#### University of Milan-Bicocca

October 2020 - October 2023

B.S. in Computer Science

Thesis' Project: Development of an Indoor Navigation Application for the University of Milan-Bicocca

Final Grade: 101

#### **KEY SUBJECTS (MASTER'S DEGREE)**

#### Machine Learning

Conents: Supervised and Unsupervised Learning

# Information Theory and Cryptography

Contents: Error Correcting Codes, Lossless Compression, Entropy,

(A)Simmetric-key Algorithms, PRNGs, Digital Signatures

# **Quantum Computing**

Contents: Parallelism, Entanglement, Measurements, Quantum Gates,

Operators, Quantum Algorithms, QFT

# **Unconventional Computing**

Contents: DNA Computing, Cellular Computing, Membrane Systems,

Spiking Neural P Systems, Genetic and Social Algorithms

## **Computational Biology**

Contents: Metabolic and Regulatory Networks, Simulation Systems, Gillespie Algorithms,

Spatio-Temporal Models, Interaction Networks, Epidemiological Models

#### **Fuzzy Systems**

Contents: Fuzzy Logic, Fuzzy Sets, Fuzzy Unsupervised Learning

#### Complex Systems

Contents: Shift Spaces, Subshifts of Finite Type, Cellular Automata, Ergodic Theory

#### Design Lab

Contents: Development of an end-to-end application using Agile Methods

Project: BicoChat - A chat webapp developed in Java (Backend) and Javascript (Frontend)

Roles: Team Leader, SCRUM Master

#### RELEVANT EXPERIENCE

## University of Milan-Bicocca

January 2023 - September 2023

Web Developer

Bicocca (MI), IT

- · Summary: Development of a Google Maps-like indoor navigation application for the University of Milan-Bicocca. Paths are computed with the A\* algorithm (Heuristic: Chebyshev distance). Positions are inferred with BLE Beacons, via RSSI Fingerprinting.
- · Tools: Android Studio, Java, Firebase Realtime DB, BLE Beacons

## **TECHNICAL STRENGTHS**

Computer LanguagesJava, Python, R, Julia, MATLABProtocols & APIsXML, JSON, SOAP, RESTDatabasesSQL, MongoDB, Neo4jToolsVSCode, IntelliJ, Eclipse

## **ACKNOWLEDGMENTS**

**Award Between Languages: C1, English** Click here to view the certificate (possibly, website is kinda junky)

## **PORTFOLIO**

**Github:** Click here to visit the page

Contents: Assignments for the Signal Processing course; in-depth study for the Fuzzy Systems course; in-depth study for the Data and Computational Biology course; and a JSON parser implemented in both Prolog and Common Lisp (I'm particularly proud of the Prolog version).