# Giacomo Cirò

#### **EDUCATION**

Bocconi University

September 2024 - present

MSc in Computer Science (Artificial Intelligence)

Milan, Italy

- GPA: 30.43/30 (top 1/40+).
- Recipient of Bocconi Graduate Merit Award (36,000 €, full tuition waiver based on academic performance).
- Relevant coursework: Software Engineering, Mathematical Methods in Computer Science, Optimization, Deep Learning, Reinforcement Learning, Computer Vision, Natural Language Processing, Information Theory, Partial Differential Equations, Complex Systems and Physical Models, Microstructure of Financial Markets.

Bocconi University September 2021 - July 2024

BSc in Economics and Computer Science

Milan, Italy

- Grade: 110 Cum Laude (highest possible).
- <u>Thesis</u> on gene expression modeling with deep learning, supervised by professor Francesca Buffa (then, hired as a researcher at the same lab).
- Relevant coursework: Machine Learning, Computer Programming, Information Theory, Linear Algebra, Calculus, Complex & Fourier Analysis, Probability, Statistics, Big Data & Databases, Game Theory, Mechanism Design, Econometrics, Principles of Finance, Microeconomics, Macroeconomics.

#### EXPERIENCE

Lexroom.ai

June 2025 - September 2025

Machine Learning Engineer

Milan, Italy

- Selected as the sole Machine Learning Engineer for a legal tech startup (hire n. 30, top 1% startup by growth), contributing to the development of an AI-powered assistant for legal professionals.
- Reduced client-facing model hallucination from 13% to 0% with a lightweight solution for real-time quote monitoring.
- Identified and resolved critical bugs in the production system's cost tracking pipeline.
- Engineered an ETL pipeline to construct a Neo4j knowledge graph from 5,000+ unstructured Italian Supreme Court's rulings and implemented an out-of-core PageRank algorithm for node relevance scoring.

## Bocconi Institute for Data Science and Analytics (BIDSA)

March 2024 - present

Machine Learning Researcher

Milan, Italy

- Secured two research contracts for the ERC-funded MicroC project, under professor Francesca Buffa's guidance.
- Designed and developed a novel model architecture that combines prior biological knowledge and insights from AlphaFold 2 for gene expression modeling.
- Earned guest researcher status at the AIRC Institute for Molecular Biology to access additional resources.
- Utilized SLURM, Anaconda and Singularity to work on two HPC clusters.
- Used TileDB for efficient out-of-core access and manipulation of 500+ GB of RNA sequencing data.
- Presented our research on transcriptomics scaling laws at <u>CIBB 2025</u>.

### Bocconi Students for Machine Learning (BSML)

 $June\ 2023\ -\ present$ 

 ${\it Co-founder,\ Vice-President}$ 

Milan, Italy

- Built the first machine learning community at Bocconi University from 0 to 60+ active members.
- Built and maintained the association's <u>website</u>, managing multiple contributors systematically (Gitflow, PRs and protection rules).
- Supervised and directed the publication of 3 articles and 3 projects.
- Conceived, developed and promoted the "Thesis Repo" to collect and make BSc theses available for free consultation.
- Planned and executed 6 events with external speakers (10+ speakers, 200+ attendees in total).
- Hosted a tutorial session on the use of Bocconi's HPC cluster.
- Organized a <u>hackathon</u> with 30 participants (70+ applications) and 150 € prize, in partnership with Boston Consulting Group X (BCG-X), The HackLab Bocconi and Bocconi For Innovation (B4I).

## ADDITIONAL INFORMATION

- Skills: Python, C/C++, R, SQL; NumPy, Pandas, scikit-learn, TensorFlow, PyTorc; Git, Linux/Unix, Microsoft Excel; Mathematical Modeling, Probability Theory, Linear Algebra, Optimization, Data Structures & Algorithms, Parallel Computing, Object-Oriented Programming (OOP).
- Languages: English (C1 Fluent IELTS 8.0); Italian (Native); Spanish (B1 - Basic).
- Community Involvement & Volunteering: AGESCI boy-scout for over 10 years. Summer camp animator and cook at boy-scout summer camps. Mentee at Lead the Future. Fellow at EuroTech Federation.
- Sport, Interests and more: Rugby player in major italian leagues from 2010 to 2023. I now practice boxe. I enjoy running fast: 21 km in 1hr:50min and 10 km in 44min. I'm good at typing fast (141 words/minute at monkeytype.com).