# GIULIO PIROTTA

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### **EDUCATION**

**Bocconi University** 

Milan, IT

MSc in Artificial Intelligence

Sep 2024 - Jul 2026

- Coursework: Computer Vision, Information Theory, Mathematics for CS, NLP, Optimization, Reinforcement Learning Software Engineering
- GPA: 28/30

### **Carnegie Mellon University**

Pittsburgh, PA

Exchange student in the School of Computer Science

Jan 2024 - May 2024

- GPA: 4.0/4.0
- Coursework: Algorithmic Game Theory, Deep Learning, Machine Learning at Scale
- Clubs: Data Science Club

#### **Bocconi University**

Milan, IT

BSc in Computer Science and Economics

Sep 2021 - Sep 2024

- Grade: 110L
- Relevant coursework: Computer Science and Programming, Database Systems, Econometrics, Game Theory, Linear Algebra, Machine Learning, Mathematical Statistics, Stochastic Processes, ...
- Thesis: "Inference with complex distribution: LDA and HDP in the context of topic modeling"
- Clubs: Bocconi Students for Data Science

#### PROFESSIONAL EXPERIENCE

Vedrai

BI Engineering Intern

Milan, IT

Jun 2024 - Oct 2024

- ML Engineering Intern Translated complex queries from SQL to SQL Alchemy and analysed data from large simulation tables
  - on Databricks, resulting in -60% costs with respect to the previous architecture Designed an AWS Lambda to log all AWS services (Step Function, Lambda, Batch, ...) into an audit database, relating runs associated to the same clients, and leveraging such logs to design an algorithm predicting new clients' costs based on historical usage patterns
  - Contributed to the maintenance of machine learning models (mostly time series)

Amazon

Luxembourg, LUX Jun 2023 - Aug 2023

Developed a predictive model for future outbound volumes exploiting regression and

- time series analysis fit on past data Achieved +10% in forecasting accuracy and significant improvements in supply chain efficiency
- Implemented a Streamlit web application hosted on EC2 to deploy the model

## **RESEARCH**

# **Bocconi Institute for Data Science and Analytics**

Milan, IT

Visiting Research Fellow

Sep 2023 - Dec 2023

- Explored features and applications of topic modelling with Latent Dirichlet Allocation, evaluating connections to Hierarchical Dirichlet Processes and other models
- Used MCMC algorithms and variational techniques to estimate inference in these paradigms
- Outlined the main results in an article (supervised by Prof. Antonio Lijoi)

# Mini gAlmes (project)

Designing a web application hosting some mini games (chomp game, connect 4) that can be played against a CPU optimized with efficient AI strategies

### IT SKILLS

Programming languages - C (medium), CSS (low), Python (high), R (medium), SQL (high) Other tools - AWS, Debugging tools, Git, Microsoft Office

#### ADDITIONAL INFO

Extra activities - Attended First Ascent, a tech competition for top CS students organized by Bending Spoons Languages - English, Italian, Spanish

Other interests - Basketball (semi-professional), Chess, Cinema, Gardening, Traveling