ALESSANDRO MOROSINI

Cambridge, MA
+1 (857) 639-0915 | morosini@mit.edu | linkedin.com/in/alessandro-morosini | morosini.mit.edu

Research Interests

Machine Learning and Optimization; Interpretable and Safe AI; Causal Inference; High-Dimensional Learning; Decision-Making under Uncertainty; Large Language Models and Reasoning.

Education

Massachusetts Institute of Technology — Cambridge, MA
PhD, Operations Research Center (ORC) — *Aug. 2025 – Present*

- Research in machine learning and optimization, advised by Prof. Georgia Perakis and Prof. Chara Podimata.
- *Relevant coursework*: Linear Optimization; Statistical Learning Theory.

Massachusetts Institute of Technology — Cambridge, MA
Master of Business Analytics (MBAn) — *Aug. 2024 – Aug. 2025*

- Final GPA: 4.9/5
- *Relevant coursework*: Machine Learning (I, II, III); Optimization Methods; Bayesian Methods; Generative AI; Deep Learning; Analytics.

Bocconi University — Milan, Italy
BSc in Economics, Management and Computer Science (BEMACS) — *Sep. 2021 – Jul. 2024*

- Final GPA: 30.2/30.
- *Relevant coursework*: Mathematics (I, II); Statistics (I, II); Computer Science (I, II); Machine Learning; Econometrics; Game Theory (I, II).
- Thesis: *Statistical Models for Survival Data Theory and Applications*, advised by Prof. Antonio Lijoi.

Experience

Massachusetts Institute of Technology — Cambridge, MA
Research Assistant — *Sep. 2024 – Present*

- Developed *ModuLearn*, an interpretable framework for incorporating gene expression data; submitted for peer review.
- Running large-scale experiments with LLM agents to simulate social behavior and measure algorithmic bias on Twitter.
- Investigating correlation-based clustering methods for high-dimensional data for feature selection.

Lineage Logistics — Cambridge, MA
Machine Learning Engineer — Capstone Project — *Feb. 2025 – Aug. 2025*

- Built an LLM-based pipeline for entity and relation extraction from emails to create knowledge graphs and ontologies.
- Implemented an LLM-as-a-judge framework to evaluate consistency and schema alignment of extracted graphs.

Balyasny Asset Management — Cambridge, MA
Data Scientist — Analytics Lab Project — *Sep. 2024 – Dec. 2024*

- Researched atmospheric condition data and the impact of noise in auto-regressive models.
- Developed a model incorporating realistic initial-state noise perturbations that outperformed Google GraphCast.

UniCredit — Milan, Italy
Data Science Intern — *Sep. 2022 – Mar. 2023*

- Developed "PeerPair", a graph-theory-based ML algorithm to identify new potential clients.
- Presented the algorithm to the Head of Analytics and AI Products.

Publications

- **ModuLearn: An interpretable transcriptomic framework for cancer outcome prediction**
  Authors: M. Gjika*, **A. Morosini***, M. Panagopoulou, A. Mertzios, K. Chatzaki, G. Perakis. *Preprint*, 2025.

Honors and Awards

- **MIT MBAn Best Student Researcher**
  MIT Sloan School of Management, 2025.

- **Bocconi Graduate Merit Award**
  Università Bocconi, 2024.
- **Full-ride Exchange Scholarship**
  University of Southern California, 2024.

Additional Information

- **Programming**
  Python, Julia, R, Stata
- **Software Tools:**
  PyTorch, TensorFlow, scikit-learn, DSPy, LangChain, Gurobi, SQL
- **Languages**
  Italian (native), English (fluent), Spanish (intermediate)
- **Passions**
  Soccer (former professional player for Parma FC), art, traveling, and meeting new cultures.