Luigi Noto

luiginoto35@gmail.com · linkedin.com/in/luiginoto · github.com/luiginoto · luiginoto.github.io

EDUCATION

New York University, New York, NY — Expected May 2023
MS in Data Science, GPA: 4.0/4.0

- Relevant coursework: **Probability and Statistics**, Optimization and Linear Algebra, **Machine Learning**, **Big Data**, Information Theory, Natural Language Processing, Inference and Representation

Bocconi University, Milan, Italy — July 2021
BS in Economics, Management and Computer Science, Grade: 110/110 cum laude

- Relevant coursework: Advanced Mathematics and Statistics, **Computer Programming**, Machine Learning, Decision and Game Theory, Big Data and Databases
- Thesis: *Bayesian Learning: Clustering with the Dirichlet Process Mixture Model*

EXPERIENCE

New York University, New York, NY — June 2022 - Present
Graduate Research Assistant - Agile Robotics and Perception Lab

- Developing robust **Meta-Learning** methods to improve active learning of quadrotor system dynamics.

Bocconi University, Milan, Italy — March 2021 - June 2021
Undergraduate Research Assistant

- Performed **literature review** and implemented computational algorithms about discrete space stochastic processes and their application to Monte Carlo methods.
- Contributed to improvement of teaching material for bachelor class in **Applied Stochastic Processes**.

Barclays, Knutsford, UK — July 2020 - August 2020
Technology Data Analyst Intern

- Consolidated and **analyzed data** about Total Cost of Ownership and Technical Debt of the technology infrastructure to highlight trends and cost optimization opportunities, using SQL and data analysis software.
- Implemented **data integrity checks** and automated **data concatenation** tasks with Excel VBA macros, saving 3-5 hours of manual work per week.

SELECTED PROJECTS

MovieLens Recommender System and Extensions. Built and evaluated a **collaborative filtering recommender system** with Spark alternating least squares (ALS) implementation using the MovieLens dataset. Compared Spark's parallel ALS model to LensKit single-machine implementation in terms of efficiency and performance. Implemented **accelerated search** at query time using Spotify's Annoy spatial data structure.

Analysis of Weather Data in Australia. Performed **hypothesis testing** (resampling methods) on temperature data to investigate climate change. Trained and evaluated **classification models** to predict next day rain occurrence (XGBoost with 0.90 test AUC and 0.75 test average precision score).

Loan Default Prediction. Trained and evaluated **classification models** to predict the probability of default on a loan with data about US small businesses (XGBoost with 93% test accuracy and 93% test sensitivity).

SKILLS

Computer — Advanced Knowledge: **Python** (Numpy, Pandas, SciPy, Matplotlib, Scikit-learn, PyTorch)
Very Good Knowledge: **SQL**, R, Latex
Intermediate Knowledge: **Spark** (PySpark), Hadoop, Git

Language — Italian (Native), English (Fluent), French (Basic)

HONORS AND ACTIVITIES

- 3rd place at Vodafone Data Science Hackathon out of 40 participating teams (February 2021)