VALERIO ROCCA

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Education

University of Padua	**Oct. 2022 – Current**
Master of Science in Data Science	*Padua, Italy*

- **Current GPA: 27.8/30** (proof)
- MSc entirely taught in English
- Relevant coursework: Machine & Deep Learning; Optimization for Data Science; Big Data Computing

Free University of Belgium	**Sep. 2023 – Current**
Erasmus+ Exchange Student in Computer Science and Engineering MSc	*Brussels, Belgium*

- Relevant coursework: Advanced Databases; Data Warehouses

University of Milan-Bicocca	**Oct. 2018 – Oct. 2022**
Bachelor of Science in Economics and Statistics	*Milan, Italy*

- Relevant coursework: Data Mining; Computational Statistics

University of Transilvania	**Feb. 2021 – Jul. 2021**
Erasmus+ Exchange Student in Business Administration BSc	*Brasov, Romania*

- Merit-based scholarship granted by University of Milan-Bicocca (700€, proof)

Experience

Birra Gaia	**Jan. 2022 – May 2022**
Waiter	*Carate Brianza, Italy*

Pizzaround No Limits	**Sep. 2018 – Sep. 2019**
Waiter	*Vertemate con Minoprio, Italy*

Projects (full portfolio on GitHub)

Constrained Optimization Algorithms	*Python*	**Jun. 2023 - Jul. 2023**

- Coded from the ground up AdaSVRF and SPIDER-FW, two state-of-the-art Frank Wolfe algorithms.
- Benchmarked them on a set of real-life tasks using an $\ell 1$-ball constraint.
- Developed a Convolutional Neural Network and a Feed-Forward Neural Network to test the algorithms.

Count Sketch Algorithm	*Python, PySpark*	**May 2023**

- Designed a MapReduce implementation of the Count Sketch algorithm for data streams.
- Successfully tested its performance in a Big Data setting (streams of 10 million items) through ad hoc statistics.

Skills

Programming languages: Python, SQL, R
Technical skills: Machine Learning, Deep Learning, Data Warehousing/ETL, Data Analysis, Data visualization
Frameworks: GitHub, PySpark, PostgreSQL, Tidyverse packages, Visual Studio Code, R Studio
Languages: Italian (native), English (C1), French (A2, in progress)

Extracurricular

Mine Vaganti NGO	**Jul. 2021 – Dec. 2021**
Participant	

- ∗ Selected for multiple Erasmus+ Youth Exchange programs across Europe.
- ∗ Implemented activities for other participants.