Giampaolo Casolla

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EDUCATION

FEDERICO II UNIVERSITY
Ms in Applied Mathematics
Graduated Mar 2019 | Naples, IT
Thesis in **Data Science**: *"Similarity Metrics for Graph Mining"*
Final mark: 110/110 cum laude

ULB
Business Intelligence & Big Data Analytics
Jul 2019 | Berlin, DE
Erasmus Mundus European Summer School, eBISS 2019

FEDERICO II UNIVERSITY
Bs in Mathematics
Graduated Oct 2016 | Naples, IT
Thesis in **Statistics**: *"Models for Binary Choice"*

SKILLS

TECHNICAL SKILLS
Proficient with:
Python • R • pandas • Scikit-learn
NumPy • TensorFlow • ggplot2 • dplyr
NoSQL • SQL • LaTeX • Linux • C
Matlab • Fortran

SOFT SKILLS
Strong:
Problem Solving • Public Speaking
Leadership • Initiative • Motivator

COURSEWORK

Machine Learning with Graphs, Stanford
Machine Learning and Applications
Information Retrieval
Stochastic Processes
Stochastic Models and Statistical Methods
Financial Mathematics
Operational Research
Numerical Analysis and Computer Programming
Numerical Methods for ODE

FUN FACTS

HOBBIES
Lifting • Brain Games • Reading

PROJECTS

KNOWLEDGE GRAPH FOR E-HEALTH DATA | Conference
Sep 2019 – Feb 2020 | Naples, IT
- Migrate 10 million rows of unstructured data from SQL to KG database.
- Extensive Data Cleaning based on NLP to retrieve 94% of the data.
- Used state-of-the-art Embeddings to apply Clustering and Supervised Learning.
- Presented at International Conference Grakn Cosmos 2020 in London.

EXPLORING UNSUPERVISED LEARNING TECHNIQUES FOR THE INTERNET OF THINGS
Jan 2019 – Aug 2019 | Naples, IT
- Developed an efficient way to analyze the paths of visitors inside a museum.
- Implemented a *k* selection strategy for Clustering based on an *ensemble* approach through a *voting technique*.
- Published 3 papers on Top journals.

DATA ANALYSIS OF ITALY CRIME INDEX | GitHub
Jan 2020 | Naples, IT
- Found 3 main groups of cities with completely different kinds of crimes.
- Visualization of the most dangerous and safeties cities.

WORK EXPERIENCE

FEDERICO II UNIVERSITY | Data Scientist
Apr 2019 – Present | Naples, IT
- Implemented a parallelization technique to find *k* for Clustering that reduced the computation time by 82%.
- Worked on projects with real data e.g. Medical e-Health and IoT museums data.
- Managed 2 Ms students for periods of 2-3 months.

IEEE | Reviewer
Jun 2019 – Present
- Reviewed more than 10 papers on Data Science topics.
- Selected at IEEE IoT (**Impact Factor 9.515**) and IEEE TII (**Impact Factor 7.377**).

AWARDS

2019	International	Selected to partecipate at eBISS Summer School, ULB
2012	23th/136	National Championship of Mathematical Games, Bocconi
2011	1st/200	Regional Championship of Mathematical Games, Bocconi

BEST PUBLICATIONS

[1] G. Casolla, S. Cuomo, V. S. Di Cola, and F. Piccialli. Exploring unsupervised learning techniques for the internet of things. *IEEE Transactions on Industrial Informatics*, pages 1–1, 2019.

[2] F. Piccialli, G. Casolla, S. Cuomo, F. Giampaolo, and V. Schiano di Cola. Decision making in iot environment through unsupervised learning. *IEEE Intelligent Systems*, pages 1–1, 2019.

[3] F. Piccialli, S. Cuomo, V. S. d. Cola, and G. Casolla. A machine learning approach for iot cultural data. *Journal of Ambient Intelligence and Humanized Computing*, Sep 2019.