Giovanni Trappolini

SUMMARY

I am a Post-Doc Researcher in Fabrizio Silvestri's RSTLESS Lab working on topics ranging from geometric deep learning to Neural Databases. Previously, I obtained my PhD under the supervision of Emanuele Rodolà in the GLADIA Lab. I thrive in dynamic, inter–disciplinary environment where I can develop new skills and solve new challenges. Please visit my website if you wanna know more!

EDUCATION

Sapienza University **Rome, Italy**
Sapienza's Excellence Track *February, 2018-May, 2018*
Additional focused educational activities for top students in the M.Sc. degree

Sapienza University
M.Sc. in Data Science, cum laude *October, 2016-October, 2018*

Luiss University
B.Sc. Statistics & Economics *September, 2013-July, 2016*

Kamiak High School **Seattle (WA), USA**
High School Diploma *August, 2011-July, 2012*

EXPERIENCE

Sapienza University
Post-Doc Researcher in Machine Learning *July, 2022-Present*
Improving the state of the art in geometric deep learning, with a particular focus on explainability and multimodality.

Sapienza University
PhD Student in Machine Learning *October, 2018-June, 2022*
Improving the state of the art in shape analysis, computer vision, and sequence generation using the latest deep learning models.

TIM S.p.a.
Data Scientist *June, 2018-September, 2018*
Developed a machine learning system for churn prediction, using a wide variety of *big* and heterogeneous data, with a lift in terms of recall of more than 40%. Spark and Hadoop were the tools used in this project.

TEACHING EXPERIENCE

Luiss University
Probability and Statistics *February, 2019 - June, 2019*

Luiss University
Machine Learning *October, 2019 - December, 2019*

Luiss University - Remote Teaching
Probability and Statistics *February, 2020 - June, 2020*

Sapienza University - Remote Teaching
The Python Programming Language for Machine Learning *September, 2020 - October, 2020*

Sapienza University - Remote Teaching
The Python Programming Language for Machine Learning *September, 2021 - October, 2021*

Sapienza University
The Python Programming Language for Machine Learning *September, 2022 - October, 2022*

KEY SKILLS

Programming Language	Python, R, SQL, Spark, Java
Research Tool	Pytorch, Pytorch Lightining, Wandb

PUBLICATIONS

- **G. Trappolini**, V. Maiorca, S. Severino, E. Rodolà, F. Silvestri, G. Tolomei
  "Sparse Vicious Attacks on Graph Neural Networks", 2022
- **G. Trappolini**, L. Cosmo, L. Moschella, R. Marin, S. Melzi, E. Rodolà
  "Shape Registration in the time of Transformers", Neurips2021.
- G. Barnabò, **G. Trappolini**, L. Lastilla, C. Campagnano, A. Fan, F. Petroni, F. Silvestri
  "CycleDRUMS: Automatic Drum Arrangement For Bass Lines Using CycleGAN", Discover Artificial Intelligence, 2023.
- O. Halimi, I. Imanuel, O. Litany, **G. Trappolini**, E. Rodolà, L. Guibas, R. Kimmel
  "Toward Shape Completion of Deformable Shapes", European Conference on Computer Vision (ECCV2020).
- **G. Trappolini**, T. Padellini, P. Brutti
  "Multiresolution topological data analysis for robust activity tracking" SIS2019, Smart Statistics for Smart Applications.

GRANTS

- Starting Research grant: "Spectral methods in geometrical deep learning for fake news detection.", 2019, Sapienza University
- Starting Research grant: "CIRCE: Cascading Information Retrieval proCEssing natural language.", 2022, Sapienza University

AWARDS

- Graduated as one of Sapienza's honours student for the class of 2018. First graduate in data Science in the history of the university to receive this award.

ACADEMIC ACTIVITY

PC member and reviewer for top conferences and journal, including:
- ICML, ECCV/ICCV, NEURIPS, EMNLP, ACL, ICLR, CVPR, WWW, AAAI, PKDD, ACL.

SUPERVISED THESIS

Supervised the following MSc degree students:
- Daniele Michelori
- Alireza Samadifardheris
- Iliyas Bektas