# 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

High School Diploma

Seattle (WA), USA

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** 

Probability and Statistics February, 2020 - June, 2020

Sapienza University

The Python Programming Language for Machine Learning September, 2020 - October, 2020

### Sapienza University

The Python Programming Language for Machine Learning

Sapienza University

The Python Programming Language for Machine Learning

September, 2021 - October, 2021

September, 2022 - October, 2022

## **KEY SKILLS**

Programming Language Research Tool Python, R, SQL, Spark, Java

Pytorch, Pytorch Lightining, Wandb

## **PUBLICATIONS**

• **G. Trappolini**, V. Maiorca, S. Severino, E. Rodolà, F. Silvestri, G. Tolomei "Sparse Vicious Attacks on Graph Neural Networks"

- **G. Trappolini**, L. Cosmo, L. Moschella, R. Marin, S. Melzi, E. Rodolà "Shape Registration in the time of Transformers", Neurips2021.
- o G. Barnabò, **G. Trappolini**, L. Lastilla, C. Campagnano, A. Fan, F. Petroni, F. Silvestri "CycleDRUMS: Automatic Drum Arrangement For Bass Lines Using CycleGAN".
- 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).
- o **G. Trappolini**, T. Padellini, P. Brutti

"Multiresolution topological data analysis for robust activity tracking" SIS2019, Smart Statistics for Smart Applications.

## **Academic Activity**

PC member and reviewer for top conferences and journal, including:

o ICML, ECCV/ICCV, NEURIPS, EMNLP, ACL, ICLR, CVPR, WWW, AAAI, PKDD.

#### REFERENCES

#### • Prof. Silvestri

Professor, Department of Computer Science and Engineering Sapienza University fsilvestri@diag.uniroma1.it

#### Prof. Rodolà

Professor, Department of Computer Science Sapienza University rodola@di.uniroma1.it