Simone Antonelli

Saarbrücken, Germany

 siantonelli.github.io/ | siantonelli | siantonelli | Simone Antonelli

Education

CISPA Helmholtz Center for Information Security *Saarbrücken, Germany*
Ph.D. in Computer Science *Nov 2022 - Current*
- Conducting research on trustworthy machine learning with a focus on graph neural networks (GNNs)
- Advised by Aleksandar Bojchevski

Sapienza University of Rome *Rome, Italy*
M.Sc. in Computer Science   GPA: $29.23/30$ *Dec 2019 - Jan 2022*
- Graduated with Distinction
- Successfully completed the excellence program for this degree programme

Sapienza University of Rome *Rome, Italy*
B.Sc. in Computer Science   GPA: $27.48/30$ *Sep 2016 - Dec 2019*
- Graduated with Distinction

Research Experience

GLADIA Research Group, Sapienza University of Rome *Rome, Italy*
Master's thesis development *Apr 2021 - Jan 2022*
- **Title:** *Human-Friendly Interpretation of a 3D Point Clouds Classifier*
- Design and implementation of a novel 3D deep generative framework to reconstruct 3D point clouds via Adversarial Autoencoder
- Explanation of a deep neural model dealing with 3D data (PointNet) through a post-hoc technique to visualize what the artificial neural network has learned

MCLab Research Group, Sapienza University of Rome *Rome, Italy*
Bachelor's thesis development *Apr 2019 - Dec 2019*
- **Title:** *ModelsTranslator, a translating tool for biological models*
- Analysis, design and development of a translating tool for biological models in several modelling languages to encourage models re-use in the community
- Test analysis and simulation of the translated models

Attended

CMMRS Pre-Doctoral Research School *Remote*
Cornell University, Maryland University, Max Planck Institute *Aug 2021*
- Admitted upon selection

Machine Learning Summer School 2021 Tapei *Remote*
Max Plack Institute *Aug 2021*
- Admitted upon selection for the General program

Publications

S. Antonelli, D. Avola, L. Cinque, D. Crisostomi, G. L. Foresti, F. Galasso, M. R. Marini, A. Mecca, and D. Pannone (Sept. 2022). "Few-Shot Object Detection: A Survey". In: *ACM Comput. Surv.* 54.11s. ISSN: 0360-0300. DOI: 10.1145/3519022. URL: https://doi.org/10.1145/3519022.

D. Crisostomi, **S. Antonelli**, V. Maiorca, L. Moschella, R. Marin, and E. Rodolà (2022). "Metric Based Few-Shot Graph Classification". In: *The First Learning on Graphs Conference*. URL: https://openreview.net/forum?id=VBXRMnRBfRF.

Skills

Programming	Python (NumPy, Scikit-learn, Matplotlib, Plotly etc.), C++, Java
Framework	PyTorch, Pytorch Lightning, WandB, Git, Docker
Miscellaneous	MacOS, Linux, Windows, Shell (Bash/Zsh), Slurm, LaTeX (Overleaf/R Markdown)