

Giulio Pagnotta

Current position

nov.'19 – now **PhD Student in Computer Science.**
university *Sapienza University of Rome, Italy*
research area *Machine Learning and Security*

Education

2019 **Master of Science in Cybersecurity.**
university *Sapienza University of Rome, Italy*
thesis title *Evading Ransomware: Techniques, Principles, and Examples*
final grade *110/110 with honors*

2017 **Bachelor in Computer Science.**
university *Sapienza University of Rome, Italy*
thesis title *ADARCH: A New Software Architecture to Make the Development of Active Defense Tools Easier*
final grade *110/110*

Extracurricular

5 – 14 may.'21 **PhD Course in Data Science**, 16 hours of classes held by Prof. Simone Scardapane.
university *Sapienza University of Rome, Italy*
topic *Reproducible Deep Learning*

4 jan. – 9 jan.'21 **PhD Summer School**, 19 hours of classes and two one and a half hour poster sessions.
The program is on ds3-datascience.
university *École polytechnique, France*
topic *Data Science*

jul.'20 **Deep Learning Specialization.**
The Deep Learning Specialization consists of approx. 125 hours of online classes divided into five courses covering theoretical background and practical applications of deep learning techniques.
Coursera

Experience

Research Projects

- Oct.'20 – **Task Leader.**
university *Sapienza University of Rome, Italy*
project **Gen4Olive** *European Union's Horizon 2020 research and innovation programme (Grant Agreement No. 101000427)*
task *T6.4: Design, implementation of machine learning techniques.*

Teaching Positions

- jan.'21 – sept.'21 **Teaching Assistant**, Sapienza University of Rome, Italy.
Data and Network Security, Master Degree course in Computer Science.
- nov.'20 – dec.'20 **Teaching Assistant**, Ministero dell'Istruzione, Università e Ricerca, Italy.
20 hours of lectures on Ethical Hacking.
- jan.'20 – sept.'20 **Teaching Assistant**, Sapienza University of Rome, Italy.
Data and Network Security, Master Degree course in Computer Science.

Scholarships and Awards

- nov.'19 – oct.'22 **PhD Scholarship.**
funding *Computer Science Department, Sapienza University of Rome, Italy.*
- jul.'20 **Third Place (AUTENTICA team member)**, *Open Innovation Challenge on "Innovative authentication for mobile devices".*
funding *Telsy and Regione Lazio*
- may.'20 **High Academic Honour Certificate (Laureato Eccellente)**, *for being among the best graduates of the academic year 2018-2019, Sapienza University of Rome.*

Languages

- native Italian
fluent English

Publications

- [1] Fabio De Gaspari, Sushil Jajodia, Luigi V. Mancini, and Giulio Pagnotta. **Towards Intelligent Cyber Deception Systems** Book: Autonomous Cyber Deception , pp.21-33.
- [2] Fabio De Gaspari, Dorjan Hitaj, Giulio Pagnotta, Lorenzo DeCarli, and Luigi V. Mancini. **The Naked Sun: Malicious Cooperation Between Benign-Looking Processes** 18th International Conference on Applied Cryptography and Network Security (ACNS 2020).
- [3] Fabio De Gaspari, Dorjan Hitaj, Giulio Pagnotta, Lorenzo DeCarli, and Luigi V. Mancini. **A Comprehensive Analysis of Detection and Evasion Techniques for Multiprocess Ransomware** submitted for publication.
- [4] Fabio De Gaspari, Dorjan Hitaj, Giulio Pagnotta, Lorenzo DeCarli, and Luigi V. Mancini. **En-CoD: Distinguishing Compressed and Encrypted File Fragments** 14th International Conference on Network and System Security (NSS2020).
- [5] Fabio De Gaspari, Dorjan Hitaj, Giulio Pagnotta, Lorenzo DeCarli, and Luigi V. Mancini. **Reliable Detection of Compressed and Encrypted Data** submitted for publication.
- [6] Dorjan Hitaj, Giulio Pagnotta, Iacopo Masi, and Luigi V. Mancini. **Evaluating the Robustness of Geometry-Aware Instance-Reweighted Adversarial Training** submitted for publication.
- [7] Giulio Pagnotta, Dorjan Hitaj, Fabio De Gaspari, and Luigi V. Mancini. **PassFlow: Guessing Passwords with Generative Flows** submitted for publication.