Rome; 19/09/1991

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#### About me:

Deep Learning enthusiast and Coder; looking for Security and Privacy through the lens of Machine Learning.

## [ 2021 - today | Research Fellow:

Institute for applied mathematics "Mauro Picone" (IAC-CNR), Italy

## [ 2019 - 2020 ] Visiting Researcher:

Stevens Institute of Technology, Hoboken, USA

Referent: Giuseppe Ateniese

## [ 2017 - today ] Ph.D Candidate in Computer Science:

Department of Computer Science; Sapienza University of Rome, Italy

Advisor: Massimo Bernaschi

## [ 2017 ] Master's degree in Computer Science:

Sapienza University of Rome, Italy Final Grade: 110/110 cum laude

Program of Study: Network and Security

# Main research topics:

- 1. Password Security.
- 2. Adversarial Machine Learning.
- 3. High Performance Computing→GPGPU.

### Preferred Tools:

- 1. python, TensorFlow.
- 2. C/C++, CUDA C++, MPI.

### Personal projects:

• https://pasquini-dario.github.io/DeepPasswd

### **Publications:**

- [1] **Dario Pasquini**, Marco Cianfriglia, Giuseppe Ateniese, Massimo Bernaschi. Reducing Bias in Modeling Real-world Password Strength via Deep Learning and Dynamic Dictionaries. 30th USENIX Security Symposium (USENIX21), August 2021
- [2] **Dario Pasquini**, Ankit Gangwal, Giuseppe Ateniese, Massimo Bernaschi, Mauro Conti. *Improving Password Guessing via Representation Learning*. In 42th IEEE Symposium on Security and Privacy (S&P21), May 2021.
- [3] **Dario Pasquini**, Giuseppe Ateniese, Massimo Bernaschi. *Interpretable probabilistic password strength meters via deep learning*. In 25th European Symposium on Research in Computer Security (ESORICS20), September 2020.
- [4] Massimo Bernaschi, Pasqua D'Ambra, **Dario Pasquini**. AMG based on compatible weighted matching for GPUs. Parallel Computing, 2020.
- [5] Massimo Bernaschi, Pasqua D'Ambra, **Dario Pasquini**. BootCMatchG: An adaptive Algebraic MultiGrid linear solver for GPUs. Software Impacts, 2020.

[6] **Dario Pasquini**, Marco Mingione, Massimo Bernaschi. *Adversarial out-domain examples for generative models*. In 2019 IEEE European Symposium on Security and Privacy Workshops, EuroS&P Workshops 2019

## Preprints:

[6] **Dario Pasquini**, Giuseppe Ateniese, Massimo Bernaschi. *Unleashing the Tiger: Inference Attacks on Split Learning*. arXiv, December 2020.