Dario Pasquini, Ph.D.

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About me:

I'm a Deep Learning enthusiast and coder; looking for **Security and Privacy** through the lens of Machine Learning.

[10/2021 - today] Postdoctoral Researcher:

École Polytechnique Fédérale de Lausanne (EPFL), Switzerland Security and Privacy Engineering Laboratory

[02/2021 - 09/2021] Research Fellow:

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

[07/2021] *Ph.D.* in Computer Science:

Sapienza University of Rome, Italy Advisor: Massimo Bernaschi

[03/2019 - 03/2020] Visiting Researcher:

Stevens Institute of Technology, USA

Advisor: Giuseppe Ateniese

[11/2017] 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.

Publications:

- [1] **Dario Pasquini**, Giuseppe Ateniese, Massimo Bernaschi. *Unleashing the Tiger: Inference Attacks on Split Learning*. ACM Conference on Computer and Communications Security (CCS21), November 2021
- [2] **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 (USENIX Sec 21), August 2021
- [3] **Dario Pasquini**, Ankit Gangwal, Giuseppe Ateniese, Massimo Bernaschi, Mauro Conti. *Improving Password Guessing via Representation Learning*. 42th IEEE Symposium on Security and Privacy (S&P21), May 2021.
- [4] **Dario Pasquini**, Giuseppe Ateniese, Massimo Bernaschi. *Interpretable probabilistic password strength meters via deep learning*. 25th European Symposium on Research in Computer Security (ESORICS20), September 2020.

- [5] **Dario Pasquini**, Marco Mingione, Massimo Bernaschi. *Adversarial out-domain examples for generative models*. IEEE European Symposium on Security and Privacy Workshops, EuroS&P Workshops 2019
- [6] Massimo Bernaschi, Pasqua D'Ambra, **Dario Pasquini**. AMG based on compatible weighted matching for GPUs. Parallel Computing, 2020.
- [7] Massimo Bernaschi, Pasqua D'Ambra, **Dario Pasquini**. BootCMatchG: An adaptive Algebraic MultiGrid linear solver for GPUs. Software Impacts, 2020.