

# Dario Pasquini

---

**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**, 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*. In 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*. In 25th European Symposium on Research in Computer Security (ESORICS20), September 2020.
- [5] Massimo Bernaschi, Pasqua D’Ambra, **Dario Pasquini**. *AMG based on compatible weighted matching for GPUs*. Parallel Computing, 2020.
- [6] Massimo Bernaschi, Pasqua D’Ambra, **Dario Pasquini**. *BootCMatchG: An adaptive Algebraic MultiGrid linear solver for GPUs*. Software Impacts, 2020.

- [7] **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