

Currently working on:

- ▲ Security of LLMs/agents applications [AISeC'24, USENIX'25, USENIX'26]
 - ▲ LLMs/agents applications to cybersecurity [ArXiv24]
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Experience:

[02/2026 - Now] Head of AI:

Cracken
-Switzerland

[11/2024 - 01/2026] Principal Researcher:

RSAC Labs
-Switzerland

— academia —

[04/2024 - 10/2024] Visiting Faculty:

George Mason University
Cybersecurity department
-Virginia, USA

[10/2021 - 03/2024] Postdoctoral Researcher:

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

[05/2020 - 9/2021] Research Fellow:

National Research Council (CNR)
Institute for applied mathematics “Mauro Picone” (IAC)
-Italy

[04/2019 - 04/2020] Visiting Researcher:

Stevens Institute of Technology
Computer Science department
-New Jersey, USA

Education:

[2018 - 2021] Ph.D. in Computer Science (fellowship winner):

Sapienza University of Rome, Italy
Advisor: *Prof. Massimo Bernaschi* (*massimo.bernaschi@cnr.it*)

[2015 - 2017] Master degree in Computer Science:

Sapienza University of Rome, Italy
Final Grade: *110/110 cum laude*
Program of Study: *Network and Security*

Worked on:

- ▲ Security & Privacy in Collaborative Machine Learning [[S&P'23](#), [CCS'21](#), [CCS'22](#)]
 - ▲ Password Security [[S&P'24a](#), [S&P'21](#), [USENIX'21](#)]
 - ▲ Leakage in Cryptosystems [[S&P'24b](#), [CCS'22](#)]
 - ▲ HPC; GPGPU, Multi-GPU [[ParComp](#)]
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Academic service:

- **Program committees:**
 - ACM CCS 2023, 2025, 2026
 - USENIX Sec. 2023, 2025
 - IEEE S&P 2026
 - IEEE SaTML 2024, 2025, 2026
 - PETS 2025.
 - **Workshops:** CRYPTO PPML 2024
- **Teaching:** 2022/2023 “*Privacy Preserving Machine Learning*” in master course: “*Advanced topics on privacy enhancing technologies*” (EPFL).

Technical Skills:

- **Machine Learning:**
 - TensorFlow (e.g., [UniversalNeuralCrackingMachines](#), [ADAMS](#))
 - PyTorch (e.g., [NeuralExec](#), [LLMmap](#))

General purpose languages & libs:

- Python (e.g., [project_mantis](#))
- MPI, CUDA (e.g., [BootCMatchG](#))
- C / C++

Real-world skills:

- Open water swimmer
 - ex-MMA practitioner
 - Weekend quant
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Publications:

Preprints:

[ArXiv24] **Dario Pasquini**, Evgenios M. Kornaropoulos, Giuseppe Ateniese. *Hacking Back the AI-Hacker: Prompt Injection as a Defense Against LLM-driven Cyberattacks* (Finalist in the “Epic Achievement” Category PwnieAwards 2025) [https://arxiv.org/pdf/2410.20911](https://arxiv.org/pdf/2410.20911.pdf)

Top-tier publications:

- [USENIX'26] **Dario Pasquini**, Evgenios M. Kornaropoulos, Giuseppe Ateniese, Omer Akgul, Athanasios Theocharis and Petros Efstathopoulos. *When AIOps Become "AI Oops": Subverting LLM-driven IT Operations via Telemetry Manipulation*. 35th USENIX Security Symposium (USENIX Sec'26), August 2026, Baltimore, MD, USA <https://arxiv.org/abs/2508.06394>
- [USENIX'25] **Dario Pasquini**, Evgenios M. Kornaropoulos, Giuseppe Ateniese. *LLMmap: Fingerprinting For Large Language Models*. 34th USENIX Security Symposium (USENIX Sec'25), August 2025, Seattle, WA, USA <https://arxiv.org/pdf/2407.15847>
- [S&P'24b] **Dario Pasquini**, Danilo Francati, Giuseppe Ateniese, Evgenios M. Kornaropoulos. *Breach Extraction Attacks: Exposing and Addressing the Leakage in Second Generation Compromised Credential Checking Services*. 45th IEEE Symposium on Security and Privacy (S&P'24), San Francisco, CA, USA, May 2024. (Finalist for the Best Crypto Attack at PwnieAwards 2024) <https://eprint.iacr.org/2023/1848.pdf>.
- [S&P'24a] **Dario Pasquini**, Giuseppe Ateniese, Carmela Troncoso. *Universal Neural-Cracking-Machines: Self-Configurable Password Models from Auxiliary Data*. 45th IEEE Symposium on Security and Privacy (S&P '24), San Francisco, CA, USA, May 2024. <https://arxiv.org/pdf/2301.07628.pdf>.
- [S&P'23] **Dario Pasquini**, Mathilde Raynal, Carmela Troncoso. *On the (In)security of Peer-to-Peer Decentralized Machine Learning*. 44th IEEE Symposium on Security and Privacy (S&P'23), San Francisco, CA, USA, May 2023 <https://arxiv.org/pdf/2205.08443.pdf>.
- [CCS'22] **Dario Pasquini**, Danilo Francati, Giuseppe Ateniese. *Eluding Secure Aggregation in Federated Learning via Model Inconsistency*. ACM Conference on Computer and Communications Security (CCS'22), Los Angeles, CA, USA, November 2022. <https://arxiv.org/pdf/2111.07380.pdf>.
- [CCS'21] **Dario Pasquini**, Giuseppe Ateniese, Massimo Bernaschi. *Unleashing the Tiger: Inference Attacks on Split Learning*. ACM Conference on Computer and Communications Security (CCS'21), Seul, Republic of Korea, November 2021. <https://arxiv.org/pdf/2012.02670.pdf>.
- [USENIX'21] **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. <https://arxiv.org/pdf/2010.12269.pdf>.
- [S&P'21] **Dario Pasquini**, Ankit Gangwal, Giuseppe Ateniese, Massimo Bernaschi, Mauro Conti. *Improving Password Guessing via Representation Learning*. 42th IEEE Symposium on Security and Privacy (S&P'21), San Francisco, CA, USA, May 2021. <https://arxiv.org/pdf/1910.04232.pdf>.

Other Publications:

- [AISeC'24] **Dario Pasquini**, Martin Strohmeier, Carmela Troncoso. *Neural Exec: Learning (and Learning from) Execution Triggers for Prompt Injection Attacks*. 17'Th ACM Workshop On Artificial Intelligence And Security (Spotlight) <https://arxiv.org/pdf/2403.03792.pdf>.
- [S&Pw'23] Etienne Salimbeni, Nina Mainusch, **Dario Pasquini**. *Your Email Address Holds the Key: Understanding the Connection Between Email and Password Security with Deep Learning*. 6th Deep Learning Security and Privacy Workshop, May 2023
- [ESORICS'20] **Dario Pasquini**, Giuseppe Ateniese, Massimo Bernaschi. *Interpretable probabilistic password strength meters via deep learning*. 25th European Symposium on Research in Computer Security (ESORICS'20), September 2020.
- [EuroS&Pw'19] **Dario Pasquini**, Marco Mingione, Massimo Bernaschi. *Adversarial out-domain examples for generative models*. IEEE European Symposium on Security and Privacy Workshops, EuroS&P Workshops'19
- [ParComp] Massimo Bernaschi, Pasqua D'Ambra, **Dario Pasquini**. *AMG based on compatible weighted matching for GPUs*. Parallel Computing, 2020
- [SoftImp] Massimo Bernaschi, Pasqua D'Ambra, **Dario Pasquini**. *BootCMatchG: An adaptive Algebraic MultiGrid linear solver for GPUs*. Software Impacts, 2020