

Luca Demetrio

Fixed-term assistant professor

✉ luca.demetrio@unige.it

Education and training

2021

Ph.D. in Computer Science and Systems Engineering

Formalizing Evasion Attacks against Security Detectors

Università degli Studi di Genova - Genova - IT

2017

Ms.C. in Computer Science

Algorithms for Multiscale Vector Quantization - 110/110 cum laude

Università degli Studi di Genova - Genova - IT

2015

Bs.c. in Computer Science

Integration between C++ and Lua - 110/110 cum laude

Università degli Studi di Genova - Genova - IT

Academic experience

2022 - ONGOING

Assistant Professor

Università degli Studi di Genova - Genova - IT

2021 - 2022

Post-doctoral Researcher

Università degli Studi di Cagliari - Cagliari - IT

Research interests

Luca Demetrio is investigating the principal issues that hinders the security of Machine Learning and Artificial Intelligence, with strong emphasis on their applications in the Cyber Security domain. With his seminal work on top-tier international journals, he highlighted how novel machine-learning threat detectors can be easily deceived by injecting minimal perturbations inside malware, potentially harming end-user devices. On top of this results, Luca is also studying how to turn these weaknesses into resources for defenders that want to improve the security of their solutions. Such can be achieved not only by studying the possible countermeasures, but also by improving the evaluation process that machine learning algorithms must endure before being deployed in production.