SIMONE MAGNANI

PhD Student



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EDUCATION

Ph.D. in Cybersecurity and Reliable Artificial Intelligence

- III Fondazione Bruno Kessler Università di Genova
- Nov 2020 ongoing

M.Sc. in Computer Engineering

- Politecnico di Torino
- Oct. 2018 Oct. 2020, 110/110 cum laude
- **9** Opportunistic Traffic Monitoring with eBPF

B.Sc. in Computer Science and Engineering

- III Università di Bologna
- **Sept 2015 Oct 2018, 110/110**
- Analisi delle Prestazioni del Linux Kernel Runtime Guardian

PUBLICATIONS

Journal Articles

• S. Magnani, D. S., F. Risso. (2022). A control plane enabling automated and fully adaptive network traffic monitoring with ebpf. IEEE Access, 10, 90778-90791. doi:10.1109/ACCESS.2022.3202644

Conference Proceedings

Doriguzzi-Corin, R., Cretti, S., Catena, T., Magnani, S., & Siracusa, D. (2022). Towards application-aware provisioning of security services with kubernetes. In 2022 ieee 8th international conference on network softwarization (netsoft) (pp. 284–286). doi:10.1109/NetSoft54395.2022.9844023

OPEN SOURCE CONTRIBUTIONS

BCC, a toolkit for creating efficient kernel tracing and manipulation programs

III IOVisor ii 2020

iovisor/bcc

Contributed to extend the support of kernel primitives in C and Python.

CrownLabs, Kubernetes-based Remote Laboratories

■ Netgroup = 2020

netgroup-polito/CrownLabs

Member of the Starting team, developed K8S APIs for the web service.

Polycube, build fast and lightweight network functions

Netgroup 2019-20

polycube-network/polycube

Created service for dynamic network traffic monitoring.

TOSHI, Total System Shield

Ⅲ EiT Digital **■** 2020

\$41m0n/eBPF_TrafficAnalyzer

Created probes for efficiently extracting data from network traffic.

Kubernetes on Desktop, run user applications in a remote cluster

Netgroup 2019-20

netgroup-polito/KubernetesOnDesktop

Enabled interactions with a cluster and offload Firefox and LibreOffice.

DeChainy, build and easily deploy network functions

☐ DeChainers ☐ 2019-20

dechainers/dechainy

Founder and maintainer of the project.

EXPERIENCE

Software Developer, (Internship)

Yoroy S.R.L.
Oct-Dec, 2017

\$41m0n/PassiveInformationGatherer

Developed a passive information gatherer system from online databases and IDSs log files.

STRENGTHS



LANGUAGES

Italian Mother tongue lelts: 7.0 overall (C1)

REFEREES

Prof. Fulvio Risso

@ Politecnico di Torino

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Corso Duca degli Abruzzi, 24, Torino (Italy)

Ph.D. Domenico Siracusa

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