

Andrea Oliveri

✉ andrea.oliveri@eurecom.fr

🎓 <https://orcid.org/0000-0001-7820-1927>

🌐 <https://www.linkedin.com/in/andrea-oliveri-5ab743152>

Education

- 2019 – 2023 **Ph.D. in Computer Engineering**, Sorbonne Universite (France)
Thesis: *"A Zero-Knowledge Approach to Memory Forensics"*
- 2017 – 2018 **Post Master's Degree in Cybersecurity**, University of Pisa (Italy)
Thesis: *"HoneySTIX: an Automatic Botnets Recognition and Reporting Infrastructure"*
- 2016 **Master's Degree in Theoretical Physics**, University of Pisa (Italy)
Thesis: *"Numerical Study of a Low Order Model for the Dynamics of the El Niño-Southern Oscillation (ENSO) Phenomenon"*

Work Experience

- 2023 – Ongoing **Postdoctoral Researcher**, EURECOM (France).
- 2018 – 2019 **Research Engineer**, Institute of Informatics and Telematics, Pisa (Italy).
Research topic: *Characterization of IoT Botnets and Linux Malwares*
- Network and System Administrator**, CNR Pisa (Italy)

Teaching

- 2024 – 2026 **Co-teaching** "Cyber-Crime and Computer Forensics" course, EURECOM
- 2022 – 2023 **Lecture** "Memory Forensics" in "Cyber-Crime and Computer Forensics" course
- 2022 **Lecture** "Memory Forensics" in "CyberSecurity Master", University of Pisa
- 2019 **Lectures** on Basic Exploitation Techniques in CyberChallenge.IT initiative, University of Pisa
- 2025 **Invited Talk** at University of Friedrich-Alexander Erlangen-Nürnberg (Germany)
- 2019 – Ongoing **Master's students projects follow-up**, 15+ students, EURECOM

Academic Service

- Program Committee member** EUROSec'26, DFW ITASEC'26, DIMVA'26, DFRWS EU'26, RAID '26, RAID'25, DFRWS EU'25, RAID'24
- Session Chair** RAID'25
- Subreviewer** S&P'22, S&P'21, S&P'20, USENIX'22, CCS'20, NDSS'20, AsiaCCS'20
- Ph.D. Thesis Examiner** 2025 Afiqah Binti Mohammad Azahari (EURECOM)
2025 Silvia Lucia Sanna (University of Rome Sapienza, Italy)
- Reviewer** Forensic Science International: Digital Investigation
ACM Transactions on Privacy and Security (TOPS)

Active Collaborations

EURECOM	Prof. Davide Balzarotti, Simone Aonzo, Aurélien Francillon
Gen Digital	Dr. Savino Dambra
IMDEA Institute	Prof. Juan Caballero
University of Genoa	Prof. Giovanni Lagorio
University of Milan	Prof. Andrea Lanzi
University of Twente	Prof. Andrea Continella

Past Collaborations

JP Morgan	Dr. Mariano Graziano
University of Genoa	Prof. Matteo Dell'Amico
University of Ruhr-Universität Bochum	Prof. Flavio Toffalini

Awards




- 2025 **Best Paper Award**, DFRWS EU 2025, Brno (Czech Republic).
- 2018 **Special Distinction for Post Master's Degree Thesis**, University of Pisa.

Grant Application

- 2026 Scientific conception and co-submission of an **Appel à projets thèse AID/DGA** Ph.D. proposal on memory forensics, currently under evaluation.

Research Publications

- ① **A. Oliveri**, M. Cavenati, S. D. Rosa, S. L. Narasimhan, and D. Balzarotti, "Lemon: A universal ebpf-based volatile memory acquisition tool for modern android devices and hardened linux systems," in *DFRWS EU 2026 - Selected Papers from the 13th Annual Digital Forensics Research Conference Europe*, **Final version submitted; bibliographic details pending.**, 2026. 🔗 URL: https://www.s3.eurecom.fr/docs/dfrwseu26_oliveri.pdf.
- ② A. M. Azahari, **A. Oliveri**, and D. Balzarotti, "Resilience of forensic evidence acquisition under database schema drift," in *DFRWS EU 2026 - Selected Papers from the 13th Annual Digital Forensics Research Conference Europe*, **Final version submitted; bibliographic details pending.**, 2026. 🔗 URL: https://www.s3.eurecom.fr/docs/azahari_dfrws26.pdf.
- ③ B. Montaruli, **A. Oliveri**, S. Dambra, and D. Balzarotti, "The role of domain-specific features in malware detection: A macos case study," in *ACM AsiaCCS 2026, Bangalore, India, June 1 - June 5*, **Final version submitted; bibliographic details pending.**, 2026. 🔗 URL: https://www.s3.eurecom.fr/docs/asiaccs26_montaruli.pdf.
- ④ A. Monzani, A. Parata, **A. Oliveri**, S. Aonzo, D. Balzarotti, and L. Andrea, "Unveiling byovd threats: Malware's use and abuse of kernel drivers," in *33th Annual Network and Distributed System Security Symposium, NDSS 2026, San Diego, California, USA, February 23 - February 27*, 2026. 🔗 URL: <https://www.ndss-symposium.org/wp-content/uploads/2026-s1491-paper.pdf>.

- ⑤ J. van Nielen, **A. Oliveri**, J. Starink, *et al.*, “Sok: Systematization, detection, and hunting of windows malware persistence techniques,” in *ACM AsiaCCS 2026, Bangalore, India, June 1 - June 5, Final version submitted; bibliographic details pending.*, 2026.  URL: https://www.s3.eurecom.fr/docs/jorik_asiaccs26.pdf.
- ⑥ D. Zhang, R. Malmain, **A. Oliveri**, D. Balzarotti, and A. Francillon, “The unbearable randomness of fuzzing,” in *IEEE European Symposium on Security and Privacy (Euro S&P 2026), Lisbon, Portugal, July 6 - July 10, Final version submitted; bibliographic details pending.*, 2026.  URL: https://www.s3.eurecom.fr/docs/toka_eurosp26.pdf.
- ⑦ **A. Oliveri** and D. Balzarotti, “A comprehensive quantification of inconsistencies in memory dumps,” in *28th International Symposium on Research in Attacks, Intrusions and Defenses (RAID 2025)*, 2025, pp. 314–328.  DOI: 10.1109/RAID67961.2025.00037.
- ⑧ **A. Oliveri**, N. Nemes, B. Andjelic, and D. Balzarotti, “A study on the evolution of kernel data types used in memory forensics and their dependency on compilation options,” **Best Paper Award**, vol. 52, 2025, p. 301863.  DOI: 10.1016/j.fsidi.2025.301863.
- ⑨ **A. Oliveri**, M. Dell’Amico, and D. Balzarotti, “An os-agnostic approach to memory forensics,” in *30th Annual Network and Distributed System Security Symposium, NDSS 2023, San Diego, California, USA, February 27 - March 3, The Internet Society*, 2023.  DOI: 10.14722/ndss.2023.23398.
- ⑩ **A. Oliveri** and D. Balzarotti, “In the land of mmus: Multiarchitecture os-agnostic virtual memory forensics,” *ACM Trans. Priv. Secur. TOPS*, vol. 25, no. 4, Jul. 2022, ISSN: 2471-2566.  DOI: 10.1145/3528102.
- ⑪ F. Toffalini, **A. Oliveri**, M. Graziano, J. Zhou, and D. Balzarotti, “The evidence beyond the wall: Memory forensics in sgx environments,” *Forensic Science International: Digital Investigation*, vol. 39, p. 301313, 2021, ISSN: 2666-2817.  DOI: 10.1016/j.fsidi.2021.301313.
- ⑫ **A. Oliveri** and F. Lauria, “Sagishi: An undercover software agent for infiltrating iot botnets,” *Netw. Secur.*, vol. 2019, no. 1, pp. 9–14, 2019.  DOI: 10.1016/S1353-4858(19)30009-1.

Miscellaneous

Languages	Italian (mother tongue), English (Professional Level), French .
CVEs	CVE-2018-17563, CVE-2018-17564, CVE-2018-17565.
Work in Progress Papers	1 paper under peer review, 4 papers in preparation.