

Andrea Oliveri

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Education

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

Work Experience

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

Teaching

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| 2019 – Ongoing | Master's students projects follow-up , 11 students, EURECOM (France) |
| 2024, 2025, 2026 | Co-teaching "Cyber-Crime and Computer Forensics" course, EURECOM |
| Lectures | 2022-2023 "Memory Forensics" in "Cyber-Crime and Computer Forensics" course, EURECOM
2022 "Memory Forensics" in "CyberSecurity Master", University of Pisa (Italy)
2019 "Basic Exploitation Techniques" in CyberChallenge.it initiative, University of Pisa (Italy) |






Academic Service

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| Program Committee member | DIMVA 26, DFRWS EU 26, RAID 25, DFRWS EU 25, RAID 24 |
| Session Chair | RAID 25 |
| Ph.D Thesis Examiner | Afiqah Binti Mohammad Azahari (EURECOM, France)
Silvia Lucia Sanna (University of Rome Sapienza, Italy) |
| Reviewer | Forensic Science International: Digital Investigation.
ACM Transactions on Privacy and Security (TOPS). |

Awards

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

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*, **Acceptance rate: 22.3%**, 2026.
- 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*, **Acceptance rate: 22.3%**, 2026.
- 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*, 2026.
- 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.
- ⑤ **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), Goldcoast, Australia, October 19 - October 22, 2025*, **Acceptance rate: 22.0%**, 2025.
- ⑥ **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," **Acceptance rate: 25.0%**, vol. 52, 2025, p. 301863.  DOI: <https://doi.org/10.1016/j.fsidi.2025.301863>.
- ⑦ **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*, **Acceptance rate: 16.2%**, The Internet Society, 2023.  DOI: <https://dx.doi.org/10.14722/ndss.2023.23398>.
- ⑧ **A. Oliveri** and D. Balzarotti, "In the land of mmus: Multiarchitecture os-agnostic virtual memory forensics," *ACM Trans. Priv. Secur.*, vol. 25, no. 4, Jul. 2022, ISSN: 2471-2566.  DOI: 10.1145/3528102.
- ⑨ 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: <https://doi.org/10.1016/j.fsidi.2021.301313>.
- ⑩ **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, French.**
CVEs CVE-2018-17563, CVE-2018-17564, CVE-2018-17565.