

Dario Facchinetti

Personal website.

Professional profile

- Assistant Professor at Università degli Studi di Bergamo (from December 31st, 2024)
- Researcher on information security topics at Università degli Studi di Bergamo (since 2021)
- Member of the UNIBG unit in European Project “GLACIATION: Green responsible privACY preserving dAta operaTIONS” (since 2022)
- Member of the UNIBG unit in European Project “MOSAICrOWN: Multi Owner data Sharing for Analytics and Integration respecting Confidentiality and OWNeR control” (2019-2021)
- PhD in Computer Science from Università degli Studi di Bergamo, advisor Prof. Stefano Paraboschi (2018-2021)
- MSc in Computer Science and Engineering from Università degli Studi di Bergamo (2016-2018)

List of publications, last update: April 8, 2025

International Conferences and Workshops

Marco Abbadini, Michele Beretta, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**Supporting Data Owner Control in IPFS Networks**”. *IEEE International Conference on Communications (IEEE ICC)*. 2024.

Marco Abbadini, Michele Beretta, Dario Facchinetti, Gianluca Oldani, Matthew Rossi, Stefano Paraboschi. “**Lightweight Cloud Application Sandboxing**”. *The 14th IEEE International Conference On Cloud Computing Technology And Science (IEEE CLOUDCOM)*. 2023.

Marco Abbadini, Dario Facchinetti, Gianluca Oldani, Matthew Rossi, Stefano Paraboschi. “**NatiSand: Native Code Sandboxing for JavaScript Runtimes**”. *The 26th International Symposium on Research in Attacks, Intrusions Defenses (RAID)*. 2023.

Marco Abbadini, Dario Facchinetti, Gianluca Oldani, Matthew Rossi, Stefano Paraboschi. “**Cage4Deno: A Fine-Grained Sandbox for Deno Subprocesses**”. *The 18th ACM Asia Conference on Computer Communications Security (ASIACCS)*. 2023.

Marco Abbadini, Michele Beretta, Dario Facchinetti, Gianluca Oldani, Matthew Rossi, Stefano Paraboschi. “**Poster: Leveraging eBPF to enhance sandboxing of WebAssembly runtimes**”. *The 18th ACM Asia Conference on Computer Communications Security (ASIACCS)*. 2023.

Enrico Bacis, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Giovanni Livraga, Stefano Paraboschi, Marco Rosa, Pierangela Samarati. “**Multi-provider secure processing of sensors data**”. *2019 IEEE International Conference on Pervasive Computing Communications Workshops (PerCom Workshops)*, pp. 349-351. IEEE, 2019.

Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**Scalable distributed data anonymization**”. *IEEE International Conference on Pervasive Computing Communications Workshops other Affiliated Events (PerCom Workshops)*, pp. 401-403. IEEE, 2021.

Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**Artifact: Scalable distributed data anonymization**”. *IEEE International Conference on Pervasive Computing Communications Workshops other Affiliated Events (PerCom Workshops)*, pp. 450-451. IEEE, 2021.

Matthew Rossi, Dario Facchinetti, Enrico Bacis, Marco Rosa, Stefano Paraboschi. “**SEApp: Bringing Matory Access Control to Android Apps**”. *The 30th USENIX Security Symposium (USENIX Security 21)*, pp. 3613-3630. 2021.

Enrico Bacis, Dario Facchinetti, Marco Guarnieri, Marco Rosa, Matthew Rossi, Stefano Paraboschi. “**I Told You Tomorrow: Practical Time-Locked Secrets using Smart Contracts**”. *The 16th International Conference on Availability, Reliability Security (ARES)*. 2021.

Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**Multi-dimensional indexes for point range queries on outsourced encrypted data**”. *IEEE Global Communications Conference (GLOBECOM)*. IEEE, 2021.

International Journals

Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangelag Samarati. “**Multi-Dimensional Flat Indexing for Encrypted Data**”, *IEEE Transactions on Cloud Computing*, 2024.

Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Giovanni Livraga, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangelag Samarati. “**Scalable Distributed Data Anonymization for Large Datasets**”, *IEEE Transactions on Big Data*, 2022.

Dario Facchinetti, Giuseppe Psaila, Patrizia Scurra. “**Mobile Cloud Computing for Indoor Emergency Response: the IPSOS Assistant case study**”, *Journal of Reliable Intelligent Environments*, 2019.

Deliverables, Technical Reports

Jonas Böhler, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**D5.4 Final versions of tools for data sanitisation computation**”, *Mosaicrown (Grant Agreement 825333 - Horizon 2021)*, 2021.

Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**D3.4 Final tools for the governance framework**”, *Mosaicrown (Grant Agreement 825333 - Horizon 2021)*, 2021.

Enrico Bacis, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Luca Ghislotti, Giovanni Livraga, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**D5.1 First Version of Data Sanitization Tools - Sanitization in Apache Spark**”, *Mosaicrown (Grant Agreement 825333 - Horizon 2020)*, 2020.

Michele Beretta, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Michele Mazzola, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati, Megan Wolf. “**D4.3 Final Encryption-based Techniques**”, *Mosaicrown (Grant Agreement 825333 - Horizon 2020)*, 2020.

Dario Facchinetti, Giovanni Livraga, “**D4.1 First Version of Encryption-based Protection Tools - Dynamic wrapping for protecting data in computations**”, *Mosaicrown (Grant Agreement 825333 - Horizon 2020)*, 2020.

Enrico Bacis, Sabrina De Capitani di Vimercati, Dario Facchinetti, Sara Foresti, Stefano Paraboschi, Matthew Rossi, Pierangela Samarati. “**D3.3 First Version of Policy Specification Language Model - Policy engine**”, *Mosaicrown (Grant Agreement 825333 - Horizon 2020)*, 2020.

PhD Thesis

Dario Facchinetti. “**Methods technologies for the secure collection, sanitization, processing release of data**”, *Aisberg Archive - Università degli Studi di Bergamo*, 2022.

Posters

Marco Abbadini, Dario Facchinetti, Gianluca Oldani, Matthew Rossi, Stefano Paraboschi. “**Enable seamless sandboxing of native components your web application most likely depends upon**”, *Cybersecurity Games & Conference (CSAW)*, 2023.

Marco Abbadini, Michele Beretta, Dario Facchinetti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi. “**WebAssembly runtime sandboxing using eBPF Linux Security Module**”, *The 18th ACM Asia Conference on Computer Communications Security (ASIACCS)*, 2023.

Matthew Rossi, Dario Facchinetti, Enrico Bacis, Marco Rosa, Stefano Paraboschi. “**Giving developers the power to declare per-component access control policy for their apps**”, *31th USENIX Security Symposium (USENIX Security 22)*, 2022.

Marco Abbadini, Dario Facchinetti, Gianluca Oldani, Stefano Paraboschi, Matthew Rossi. “**Enhancing the security of WebAssembly runtimes using Linux Security Modules**”, *31th USENIX Security Symposium (USENIX Security 22)*, 2022.

Matthew Rossi, Dario Facchinetti, Enrico Bacis, Marco Rosa, Stefano Paraboschi. “**SEApp: Bringing Matory Access Control to roid Apps**”, *Cybersecurity Games & Conference (CSAW)*, 2021.