

Marc DAMIE

Ph.D. Student in Privacy-Preserving Machine Learning

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🎓 Education

Ph.D. in Computer Science (*under preparation*)

Apr. 2022 - now

Université de Lille

Subject: Secure protocols for verifiable decentralized machine learning. **Supervisors:** Dr. Jan Ramon (Inria Lille, France), Prof. Andreas Peter (University of Oldenburg, Germany), and Dr. Florian Hahn (University of Twente, The Netherlands).

Master's Degree in Computer Science (i.e., "*Diplôme d'ingénieur*")

Sep. 2016 - Aug. 2022

Université de Technologie de Compiègne

Major: Data Mining. **3 Minors:** Philosophy / Technological Controversies / Math Modelling. **GPA:** 5/5.

French Scientific "*Baccalauréat*"

Sep. 2013 - Jul. 2016

Lycée Fénélon (93)

🏢 Employment History

University of Twente

October 2023 - September 2025

Researcher contract (i.e., end of Ph.D. preparation)

Inria

April 2022 - September 2023

Doctoral contract

Inria

October 2021 - April 2022

Research engineer in the MAGNET team

Inria

Feb. 2021 - Jul. 2021

Research engineering internship in the MAGNET team

University of Twente

Feb. 2020 - Jul. 2020

Research intern in the Services, Cybersecurity and Safety group

Gatewatcher

Aug. 2019 - Feb. 2020

Back-end intern on the intrusion detection system Trackwatch

Freelance

2020

MOOC-like content for a programming training

🏛️ Academic Service

Reviews

2022 - now

Sub-reviews for CCS 2024, PETS 2023, CODASPY 2022.

Artifact Evaluation

2023 - now

Member of the AE committees of NDSS 2025, NDSS 2024, PETS 2025, PETS 2024.

Scientific events

2024 - now

Part of the local organization of the CSF symposium 2024

Student Representative in the Board of Directors

2017 - 2021

Université de Technologie de Compiègne

Publications

- [1] **M. Damie**, F. Hahn, and A. Peter, "A Highly Accurate Query-Recovery Attack against Searchable Encryption using Non-Indexed Documents", USENIX Security 2021
- [2] M. Dijkslag, **M. Damie**, F. Hahn, and A. Peter, "Passive query-recovery attack against secure conjunctive keyword search schemes", ACNS 2022
- [3] **M. Damie**, J-B. Leger, F. Hahn, and A. Peter, "The statistical nature of leakage in SSE schemes and its role in passive attacks", [Under review] 2024
- [4] **M. Damie**, F. Hahn, J. Ramon and A. Peter, "Secure Sparse Matrix Multiplications and their applications to Privacy-Preserving Machine Learning", [Under review] 2024
- [5] **M. Damie**, F. Hahn, J. Ramon and A. Peter, "How to securely shuffle? A survey about secure shufflers in Federated Learning", [To be submitted] 2024

Awards and Honors

May 2022 Nomination (i.e., top 3) for the Dutch cybersecurity research paper for Damie et al. (USENIX 2021)

Science communication

Silbersalz Institute

2024

Training programme for scientists wanting to break into the media sphere.

Scientific Game Jams

2024

Co-created two small games presenting scientific concepts. My itch.io: MarcT0K

Wikipedia contributions

2023 - now

More than 1000. Mostly on French-speaking Wikipedia.

Volunteering in non-profit organization

Rhizome (non-profit Internet Service Provider)

2018 - 2022

Member then treasurer

TEDxUTCompiègne

2017 - 2018

Communication and Partnerships Manager

References

- Prof. *Andreas Peter*
University of Oldenburg, Germany ✉ andreas.peter@uni-oldenburg.de
- Dr. *Jean-Benoist Leger*
University de Technologie de Compiègne, France. ✉ jbleger@hds.utc.fr