

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 (UTC) - Alliance Sorbonne Université

Major: Data Mining and Engineering. *3 Minors:* Philosophy, Technology and Cognition/ Communication and Technological Controversies/ Mathematical 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 PhD 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.

Wikipedia contributions

2023 - now

More than 1000. Mostly on French-speaking Wikipedia.

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)

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