Marc DAMIE

Applied Cryptographer, Ph.D.

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🎓 Education

Ph.D. in Computer Science — Apr. 2022 - Dec. 2025
Université de Lille
Topic: Privacy-Preserving Computations on Sparse Data.
Supervisors: Jan Ramon (Inria, FR), Andreas Peter (University of Oldenburg, DE), and Florian Hahn (University of Twente, NL).

Master's Degree in Computer Science (i.e., "*Diplôme d'ingénieur*") — Sep. 2016 - Aug. 2021
Université de Technologie de Compiègne
Major: Data Mining. **3 Minors**: Philosophy / Technological Controversies / Math Modelling. **GPA**: 5/5.

💼 Employment History

University of Twente — Oct. 2023 - Dec. 2025
Researcher contract in the Services, Cybersecurity and Safety group

Inria — Apr. 2022 - Sep. 2023
Doctoral contract in the MAGNET (MAchine learninG in information NETworks) team

Inria — Feb. 2021 - Mar. 2022
Research engineer in the MAGNET (MAchine learninG in information NETworks) 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 an intrusion detection system

🚀 Volunteering

Ctrl+Alt+Reclaim (People vs. Big Tech) — 2024-
Co-founder of a youth movement promoting youth-driven digital regulations

Twente Hacking Squad — 2023-
Member and active player in CTF challenges

Rhizome (non-profit Internet Service Provider) — 2018 - 2022
Member then treasurer

🎤 Public Speaking

Komm setz dich! at the Silbersalz Festival — 2024
Round table on "Privacy in the digital world, mission impossible?" — *Halle, Germany*

PublicSpaces Conference — 2024
Lightning talk on "Federated Machine Learning for the Fediverse" — *Amsterdam, The Netherlands*

ONE Conference — 2025
Round table on "Teaching ethics to (future) IT professionals" — *The Hague, The Netherlands*

ONE Conference — 2025
Talk on "Are you sure that your LLM is not poisoned?" (Young Talents programme) — *The Hague, The Netherlands*

✒️ 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, *"Revisiting the attacker's knowledge in inference attacks against Searchable Symmetric Encryption"*, ACNS 2025

[4] B. van Dartel, **M. Damie**, and F. Hahn, *"Evaluating Membership Inference Attacks in heterogeneous-data setups"*, SiMLA workshop (co-located with ACNS) 2025

[5] **M. Damie**, F. Hahn, A. Peter, and J. Ramon, *"Eliminating Exponential Key Growth in PRG-based Distributed Point Functions"*, DPM (co-located with ESORICS) 2025

[6] **M. Damie**, F. Hahn, A. Peter, and J. Ramon, *"DDH-based schemes for multi-party Function Secret Sharing"*, NordSec 2025

[7] **M. Damie**, M. Pop, and M. Posthuma, *"Energy Consumption of TLS, Searchable Encryption, and FHE"*, FPS 2025

[8] **M. Damie**, F. Hahn, A. Peter, and J. Ramon, *"Secure Sparse Matrix Multiplications and their applications to PPML"*, 2025

[9] **M. Damie**, F. Mazzone, F. Hahn, A. Peter, and J. Ramon, *"Noisy Function Secret Sharing and its application to DP"*, 2025

[10] **M. Damie**, and E. Cyffers, *"Fedivertex: a dataset of Decentralized Social Networks for Trustworthy Machine Learning"*, 2025

[11] **M. Damie**, F. Hahn, A. Peter, and J. Ramon, *"How to securely shuffle? A survey about secure shufflers in privacy-preserving computations"*, 2025

[12] N.Guldali, C. Gupta, and **M. Damie**, *" IoTLS 2.0: How Far Has IoT Industry Come in Securing Communications with TLS?"*, 2025

📢 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 contributions. Mostly on French-speaking Wikipedia.

🏛️ Academic Service

Reviews   2022 - now
Reviews (or sub-reviews) for UAI 2025, CCS 2024, PETS 2023, CODASPY 2022.

Artifact Evaluation   2023 - now
Member of the AE committees of PETS 2025, NDSS 2025, NDSS 2024, PETS 2024.

Scientific events   2024 - now
Parf of the local organization of the CSF symposium 2024

Student Representative in the Board of Directors   2017 - 2021
Université de Technologie de Compiègne

🎗️ Awards and Honors

May 2022	Nomination for Dutch Cyber Security best Research Paper (DCSRP) 2021
March 2025	Young Talents in Cybersecurity 2025 (by the French Embassy in the NL and Dutch Embassy in FR)
July 2025	Distinguished Reviewer PETS AE 2025