

# Hi! I'm Marc Damie 🖐️

**Ph.D. student** at Inria 🇫🇷 and Univ. of Twente 🇳🇱 in  
**privacy-preserving technologies.**



# The Fediverse in 2024

- Fediverse  $\approx$  **decentralized social media** platforms.
- **11M accounts**, 1M active users, 28K servers.
- **What's the next step?** 100M users? 1B users?

# Can the Fediverse host 1B users? 🚀

- In its current version... **I don't think so.**
  - Many core operations are **manual or unoptimized.**
  - Example: **content moderation**
- ➡ The Fediverse **needs new tools** to support its growth.

# Federated ML for the Fediverse

# What is Federated Machine Learning? 🔍

- **Decentralized protocols to train AI models** without sharing (personal) training data.



➡ Can train **AI in the Fediverse** while **preserving data privacy!**

💡 **Idea:** build federated AI systems to **reduce the operation costs.**

# Potential applications in the Fediverse

- **Spam filtering**, content moderation, content recommendation, video transcoding, etc.
- Tech giants **reduce their operations costs** using AI.




The Fediverse should **do the same!**

# Building an ethical AI paradigm

- **Frugality**
- **Privacy**
- **Fairness**
- **Usefulness**
- **Open-source**
- **Transparency**

# Contact

- Interested in **Federated ML**?
- Want talk about **privacy technologies**?
- Ideas for **new applications** in the  ?
- Email me: **m.f.d.damie@utwente.nl**





See you in the  
Fediverse!

