International Tech & Data Conference

Privacy & Pandemics: Responsible Uses of Technology & Health Data

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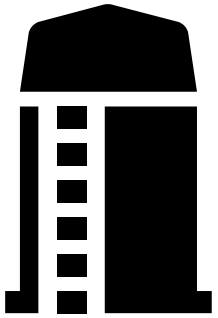
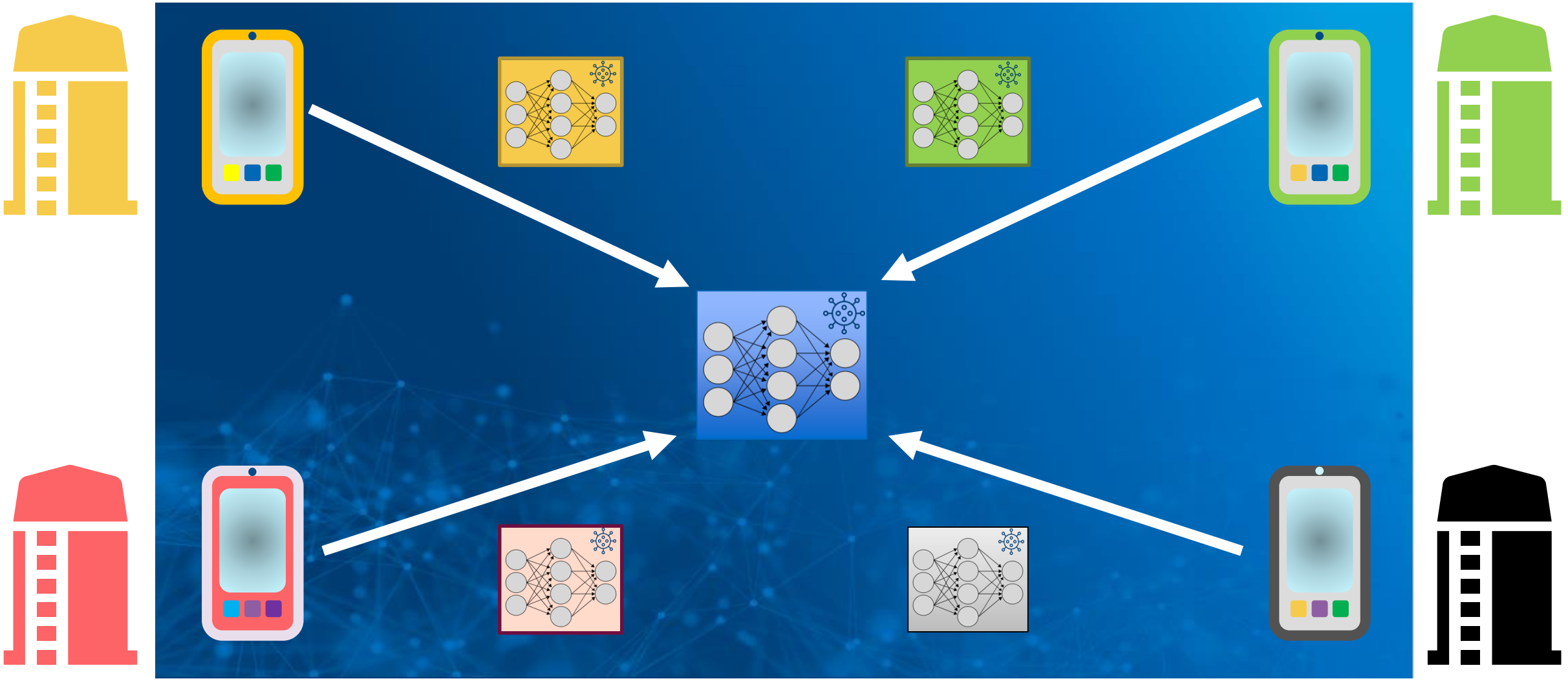
THE DATA SILO PROBLEM



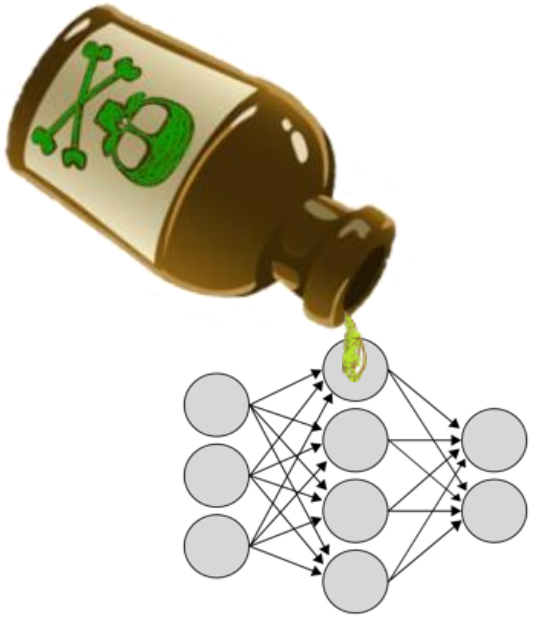
- Privacy / Legality (HIPAA / GDPR)
- Data too valuable (or unknown value)
- Data too large to transmit

FEDERATED LEARNING = NO MORE SILOS

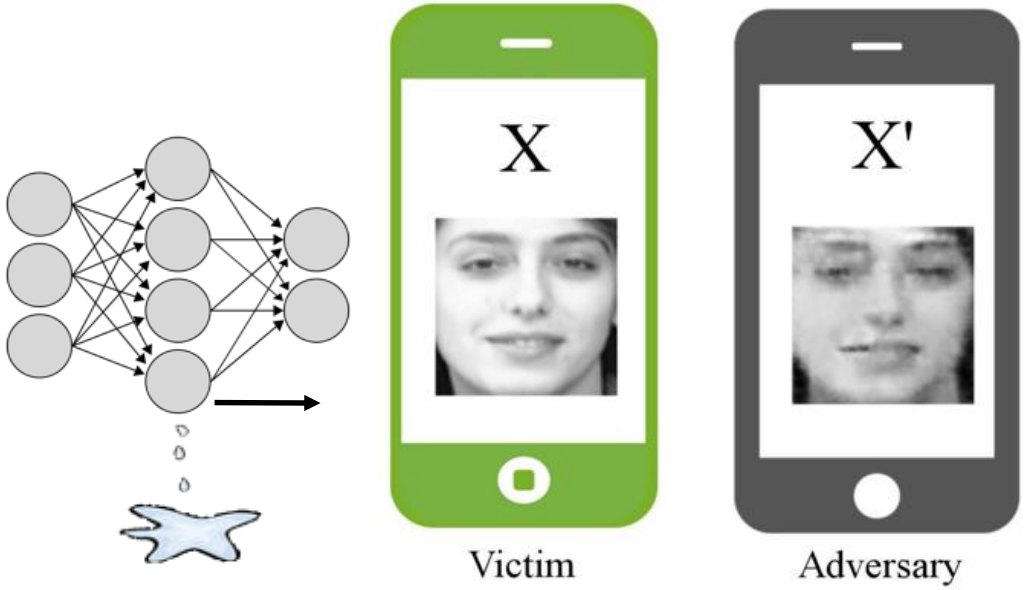


ai.googleblog.com/2017/04/federated-learning-collaborative.html

FEDERATED LEARNING (FL) COULD INCREASE SECURITY AND PRIVACY RISKS



Poisoning attacks may maliciously **alter** models.



Extraction attacks **recover training data** from models.

FL needs to have additional **security** to manage these risks.

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