### SYRINE BEN AZIZA **SPEAKER**

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#### **TOPIC:**

#### **DECENTRALISED SECURE MODELLING OF ELECTROLYZER**

The rapid evolution of Electrolyzer technologies demands efficient and secure methods for exchanging sensitive information among distributed stakeholders. Our work proposes a novel solution for secure exchange of information between Electrolyzer Operators while preserving data privacy.



Our approach leverages Federated and Transfer Learning techniques, incorporating local predictive models and a central global model as a two-tier learning system. By training local models on individual Electrolyzer system, we enable the central global model to aggregate the learned features without directly accessing the sensitive data. This approach not only alleviates issues generated by anti-competitiveness regulations, as many businesses don't want to share data, but also enables efficient information exchange among Electrolyzer operators in a distributed context.

# OVER SYMPOSIUM 2024: (UN)REAL







IGN-UP









