

Adversarial Training in Federated Learning

FAT(Federated Adversarial Training) (2020) [23] : **Original Idea**

Heterogeneous Problems

*FedRobust (2020) [101] : **Solve Distribution Shifts***

*Federated Robustness Propagation(2021) [105] : **Different Computing Resources***

*CalFAT (2023) [24] : **Skewed Labels Problem***

*DBFAT (2023) [34] : **Decision Boundary***

Certified Guarantees

*Certifiably Robust Federated Adversarial Learning (2021) [104] : **Randomized Smoothing***

*Adversarial Robustness through Bias Variance Decomposition (2022) [108] : **Variance decomposition***

Privacy Leakage

*FedBVA (2020) [103] : **Privacy Protect***

*Privacy Leakage of Adversarial Training (2022) [106] : **Privacy Protect***

Slow Convergence

*Adversarial Training in Communication Constrained Federated Learning (2021) [107] : **Converge Quickly***