Les outils de FL

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1 Introduction

Outils	**Algorithme**	**Modèles d'apprentissage au niveau des clients**	**les algorithme d'agrégation au niveau de serveur**
IBM Federated Learning [1]	XGBoost, Nave Bayes, Deep Reinforcement Learning, FedAvg, SPAHM, PFNM, Krum et Zeno	Réseaux neuronaux, Arbres de décision, XGBoost, Classificateurs linéaires, Naive Bayes, Apprentissage par renforcement profond	Federated Average (FedAvg), Krum, Zeno
FedML [2]	FedAvg, FedProx, FedMA, FedNova, FedBoost, FedOpt	Federated Averaging (FedAvg), Decentralized FL, Vertical Federated Learning (VFL), Adaptive Federated Optimizer, FedNova, FedProx, FedMA	Federated Averaging (FedAvg), Federated Stochastic Gradient Descent (FedSGD), Federated Momentum, Federated Proximal, Federated Adaptive Gradient, Federated Newton, Federated QSGD, Federated Averaging with Local Adversarial Robustness
Flower [3]	FedAvg, FedProx , QFedAvg , FedOptim	Réseaux neuronaux, Arbres de décision, Classificateurs linéaires, Naive Bayes, Apprentissage par renforcement profond	FedAvg, FedProx , QFedAvg , FedOptim
TensorFlow Federated [4]	FedAvg, Optimisation Fédérée, k-menas, Apprentissage de Modèles de Langage Fédéré	Apprentissage fédéré pour les Données de Santé	FederatedAveraging, Federated Weighted Median, Secure Aggregation, Differential Privacy Aggregation, Custom Aggregation

Table 1: Description des outils

Outils	**VFL**	**HFL**	**IoT/Mobile**
IBM Federated Learning	✓	✓	X
FedML	✓	✓	✓
Flower	✓	✓	✓
TensorFlow Federated	✓	✓	X

Table 2: de outils Federated Learning

References

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