Motivation

No defense against both privacy and robustness attacks

Can we use DP (Central and/or Local) as a defense?

Intuition:

CDP should limit information exposed about a specific participant

LDP same for records in a participant's dataset

In both cases, the impact of poisonous data should be reduced while simultaneously protecting against inference attacks

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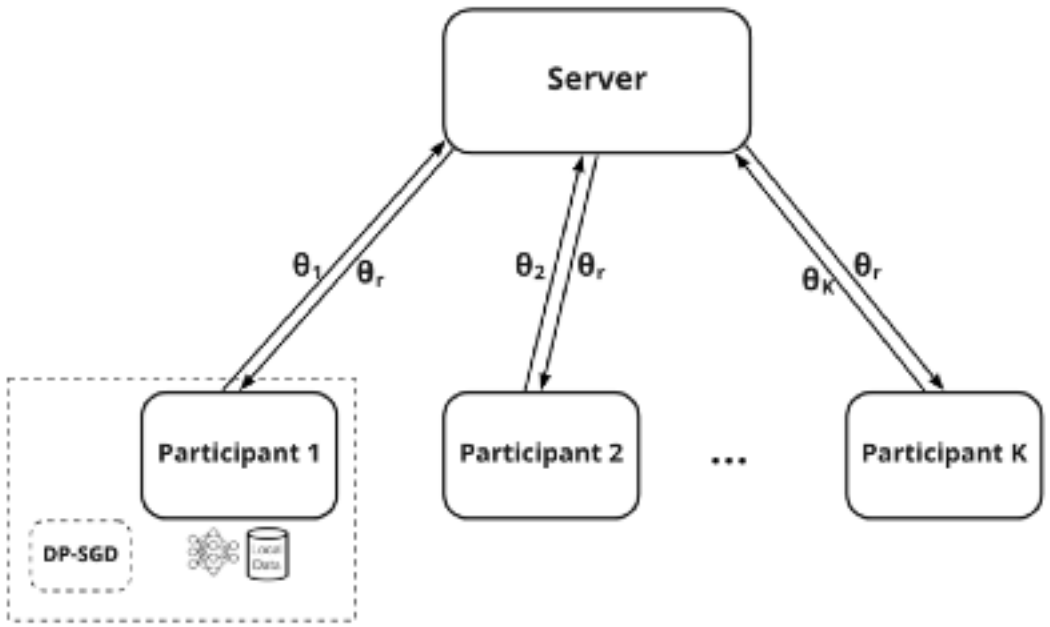
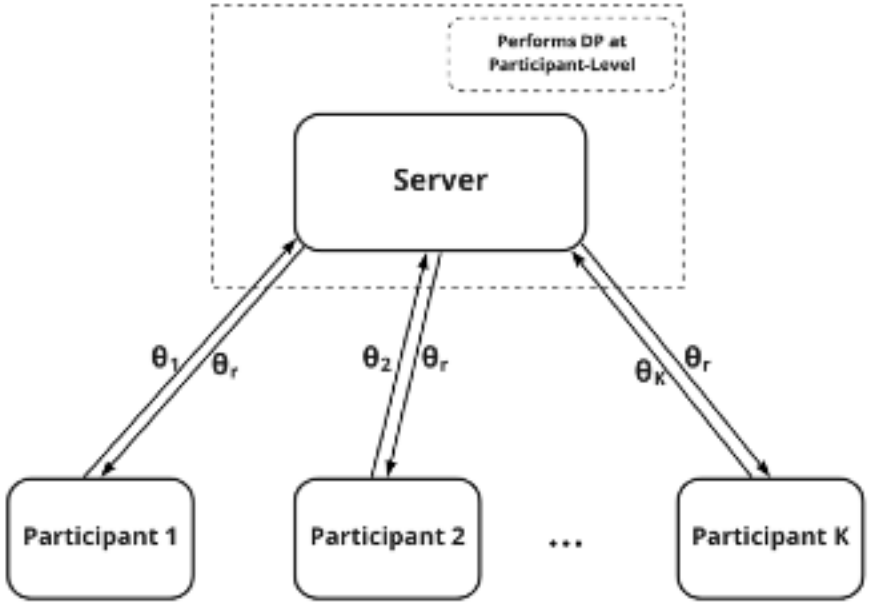
Local vs Central DP



Local Differential Privacy (LDP)



Central Differential Privacy (CDP)