

Server θ^t

Client 1 θ^t

(1) Distribute Global Model

(2) Local Training
Multiple SGD Steps

(3) Send Updates θ_1^{t+1} (not raw data)

(4) Weighted Aggregation

$$\theta^{t+1} = \sum \frac{n_k}{n} \theta_k^{t+1}$$

Repeat cycle
for multiple rounds

Client 2 θ_1^{t+1}

More Clients

