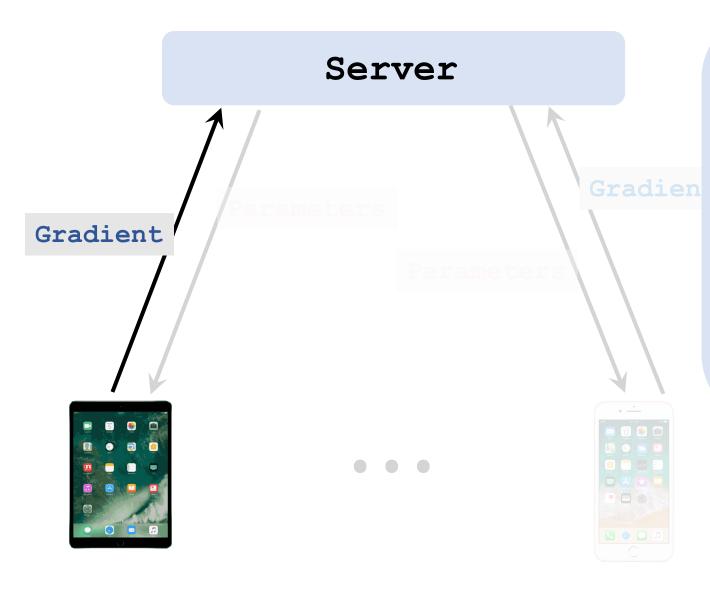
## Let us recall parallel gradient descent



## The server performs:

- 1. Receiving gradients  $\mathbf{g}_1, \dots, \mathbf{g}_m$  from all the m workers.
- 2. Computing  $\mathbf{g} = \mathbf{g}_1 + \cdots + \mathbf{g}_m$ .
- 3. Updating model parameters:

$$\mathbf{w} \leftarrow \mathbf{w} - \alpha \cdot \mathbf{g}$$
.