FL Training Process

Server
LLaMA 7B

A_1, B_1 A_2, B_2 A_n, B_n

C_1 C_2 ... C_n

...

Model update by LORA module (A, B)

Client local instructions

Client local LLM

Pretrained model
$W \in R^{d \times x}$
d_{model}

Task: Brainstorming

Instruction: Why mobile is bad for human

Context: " "

Response: We are always engaged one phone which is not good.

Task: Summarization

Instruction: Please summarize what Linkedin does.

Context: "LinkedIn (/lɪŋktˈɪn/) is a business and…"

Response: Linkedin is a social platform that business…

Task: Open_qa

Instruction: What happens when the sun goes down?

Context: " "

Response: When the sun sets, the evening starts.

...

Heterogeneous Instructions