Client 1

p_G
p_1

Client i

p_G
p_i

Server

Client N

p_G
p_N

Prompts

"a photo of a ⟨class⟩"

p_G ⟨class⟩

Adaptation term Δp_i

U_i V_i

p_i ⟨class⟩

Text Encoder

Image Encoder

Textual Feature

z_C

$z_{i,G}$

$z_{i,P}$

Positive

Negative

$\mathcal{L}_{con}$

$\mathcal{L}$

Image Feature

$f(x)$

$\mathcal{L}_{ce}$

🔥 : Learnable   ❄ : Frozen   ▮•▬ : Low-rank decomposition   ↰ : Knowledge-guidance   ⊕ : Matrix addition   ⊗ : Metric function