

Outer loop

1. Sample a batch of tasks from the meta-train set
2. For each task t , perform the inner loop:

Inner loop

- a) Sample D_{train}^t and D_{test}^t
- b) Adapt the model on D_{train}^t
- c) Compute the generalisation loss on D_{test}^t

$$\mathcal{L}(D_{\text{test}}^t \mid \theta, D_{\text{train}}^t)$$

3. Update θ to minimise the empirical meta-risk

$$\frac{1}{|T|} \sum_{t \in T} \mathcal{L}(D_{\text{test}}^t \mid \theta, D_{\text{train}}^t)$$