

Repeated by Resampling

$\lambda_1, \lambda_2, \lambda_3, \dots$

$\mathcal{D}_{\text{test}}$

$\mathcal{D}_{\text{train}}$

\mathcal{I}_λ

$\hat{f}/\hat{\theta}$



$\min_{\theta} \mathcal{R}_{\text{emp}}(\theta)$



$\rho(\mathbf{y}_{J_{\text{test}}}, \mathbf{F}_{J_{\text{test}}})$

Input

Data \mathcal{D} , Inducer \mathcal{I} , metric ρ ,
splits \mathcal{J} , search space $\tilde{\Lambda}$

Update Optimizer

HPO
Loop

Propose new HPC
 λ^+

Evaluate by Resampling
 $c(\lambda^+)$

Return
HPC $\hat{\Lambda}$