CROSS-VALIDATE(
$$\mathcal{D}$$
,  $k$ )

1 divide  $\mathcal{D}$  into  $k$  chunks  $\mathcal{D}_1, \mathcal{D}_2, \dots \mathcal{D}_k$  (of roughly equal size)

2 **for**  $i = 1$  **to**  $k$ 

3 train  $h_i$  on  $\mathcal{D} \setminus \mathcal{D}_i$  (withholding chunk  $\mathcal{D}_i$ )

4 compute "test" error  $\mathcal{E}_i(h_i)$  on withheld data  $\mathcal{D}_i$ 

5 **return**  $\frac{1}{k} \sum_{i=1}^k \mathcal{E}_i(h_i)$