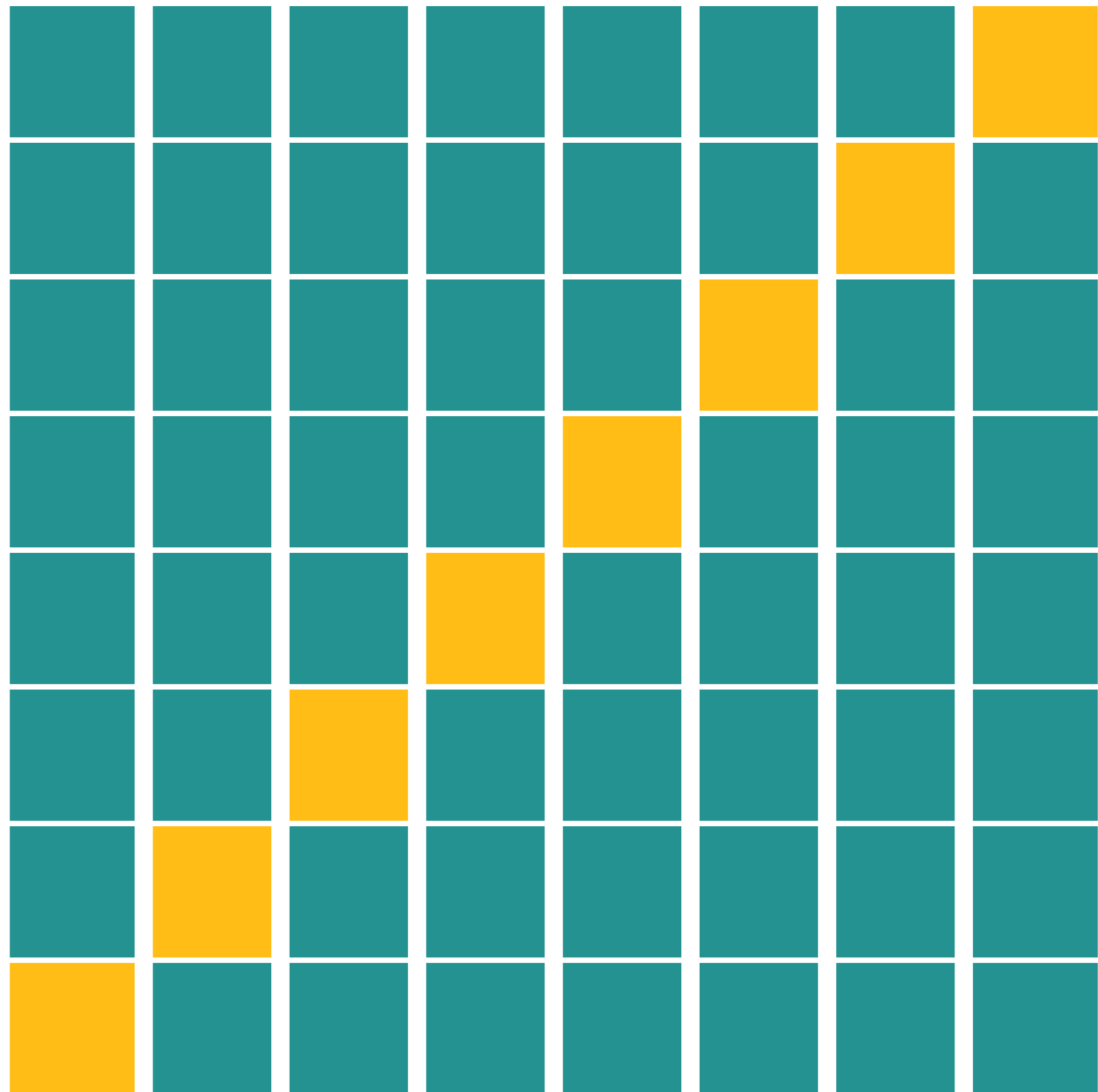


K-Fold Cross Validation

data

 **train**
 **test**



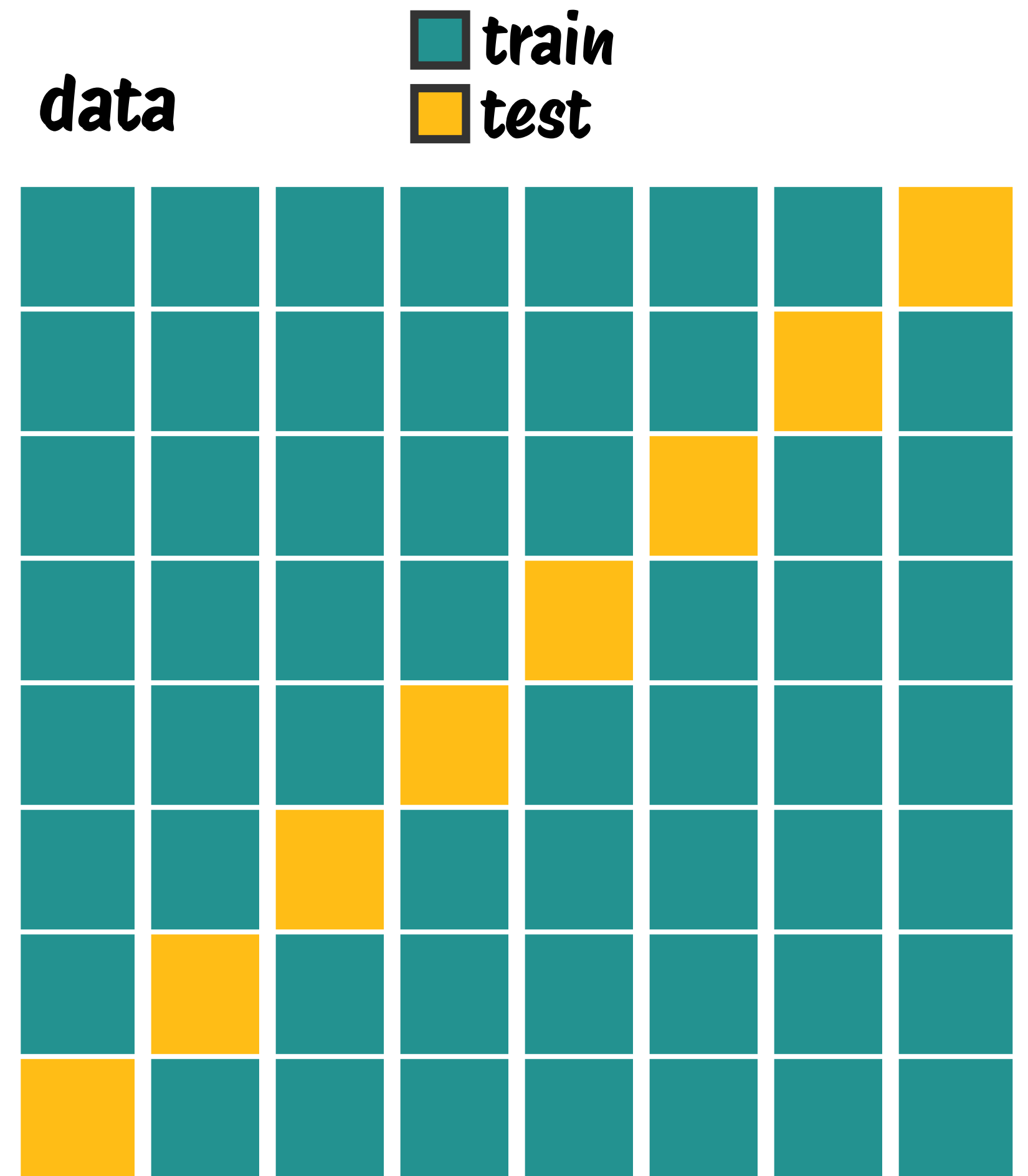
cross validation simulates multiple train-test splits on the training data

1. Randomly divide the data into K equal-sized parts
2. Leave out one part k out
3. Fit model to $K-1$ parts combined ("train")
4. Obtain predictions for the left out part k ("test")
5. Repeat for each part $k=1,2,\dots,K$
6. Combine results to get error estimates

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Leave-One-Out Cross Validation (LOOCV)

cross validation **simulates multiple train-test-splits** on the training data