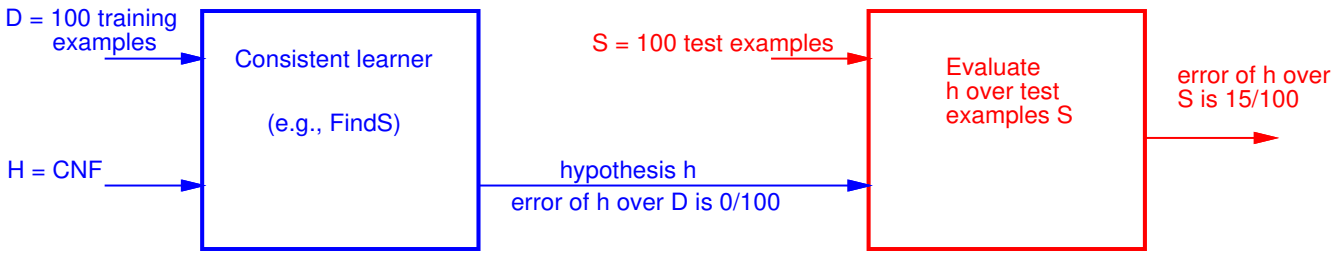
Estimating True Error



D and S are drawn independently from X according to distribution $\mathcal{D}$.

Can we give an interval into which $error_{\mathcal{D}}(h)$ falls with probability .95?

1. Based on test data S?
2. Based on training data D?
3. Based on both??