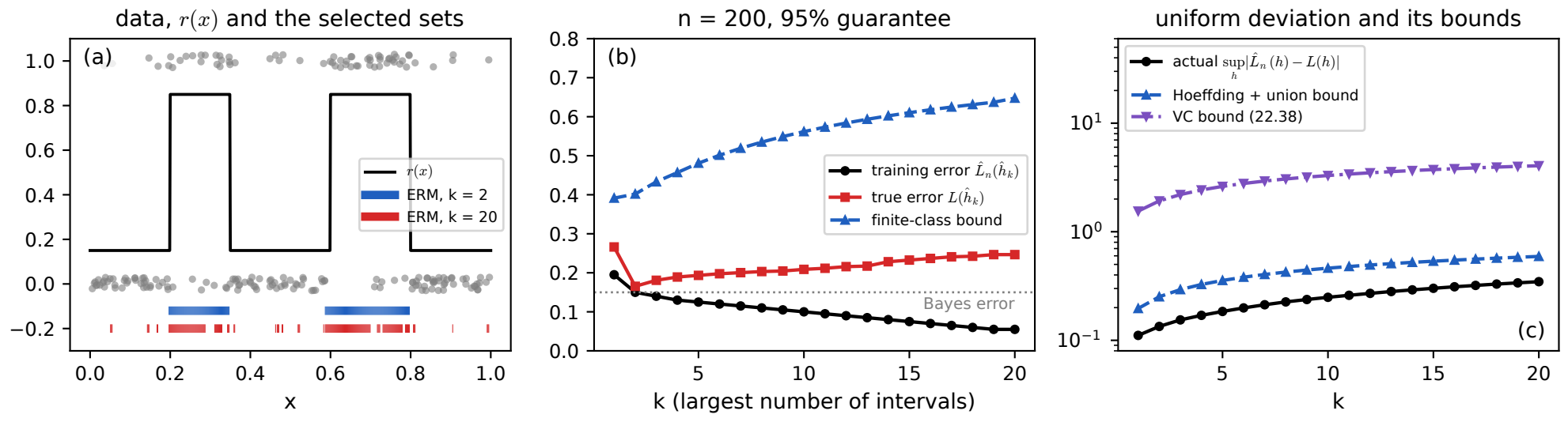

data, $r(x)$ and the selected sets
(a)
$r(x)$
ERM, k = 2
ERM, k = 20
x
n = 200, 95% guarantee
(b)
training error $\hat{L}_n(\hat{h}_k)$
true error $L(\hat{h}_k)$
finite-class bound
Bayes error
k (largest number of intervals)
uniform deviation and its bounds
actual $\sup_h |\hat{L}_n(h) - L(h)|$
Hoeffding + union bound
VC bound (22.38)
(c)
k