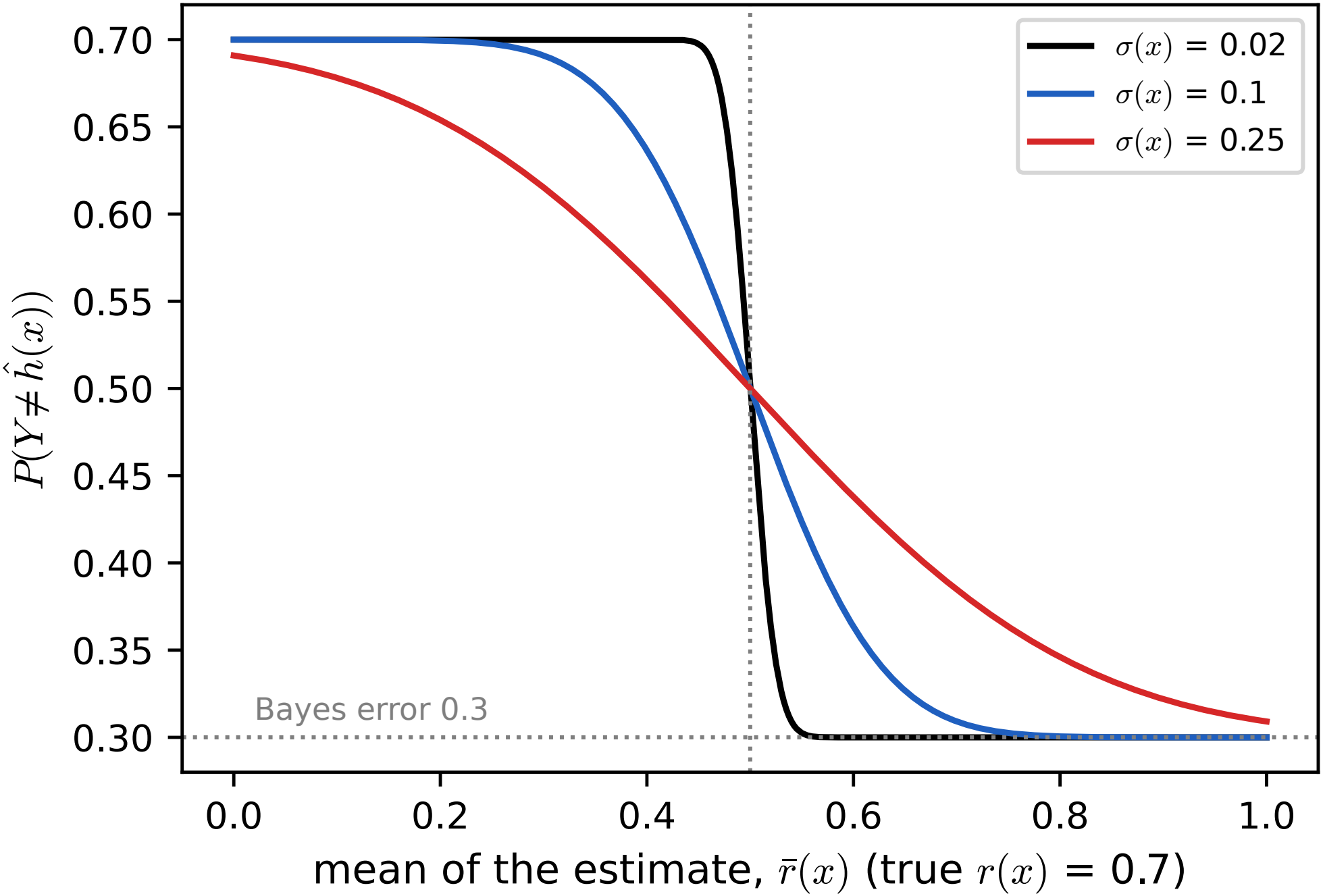

0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
$P(Y \neq \hat{h}(x))$
$\sigma(x)$ = 0.02
$\sigma(x)$ = 0.1
$\sigma(x)$ = 0.25
Bayes error 0.3
0.0
0.2
0.4
0.6
0.8
1.0
mean of the estimate, $\bar{r}(x)$ (true $r(x)$ = 0.7)