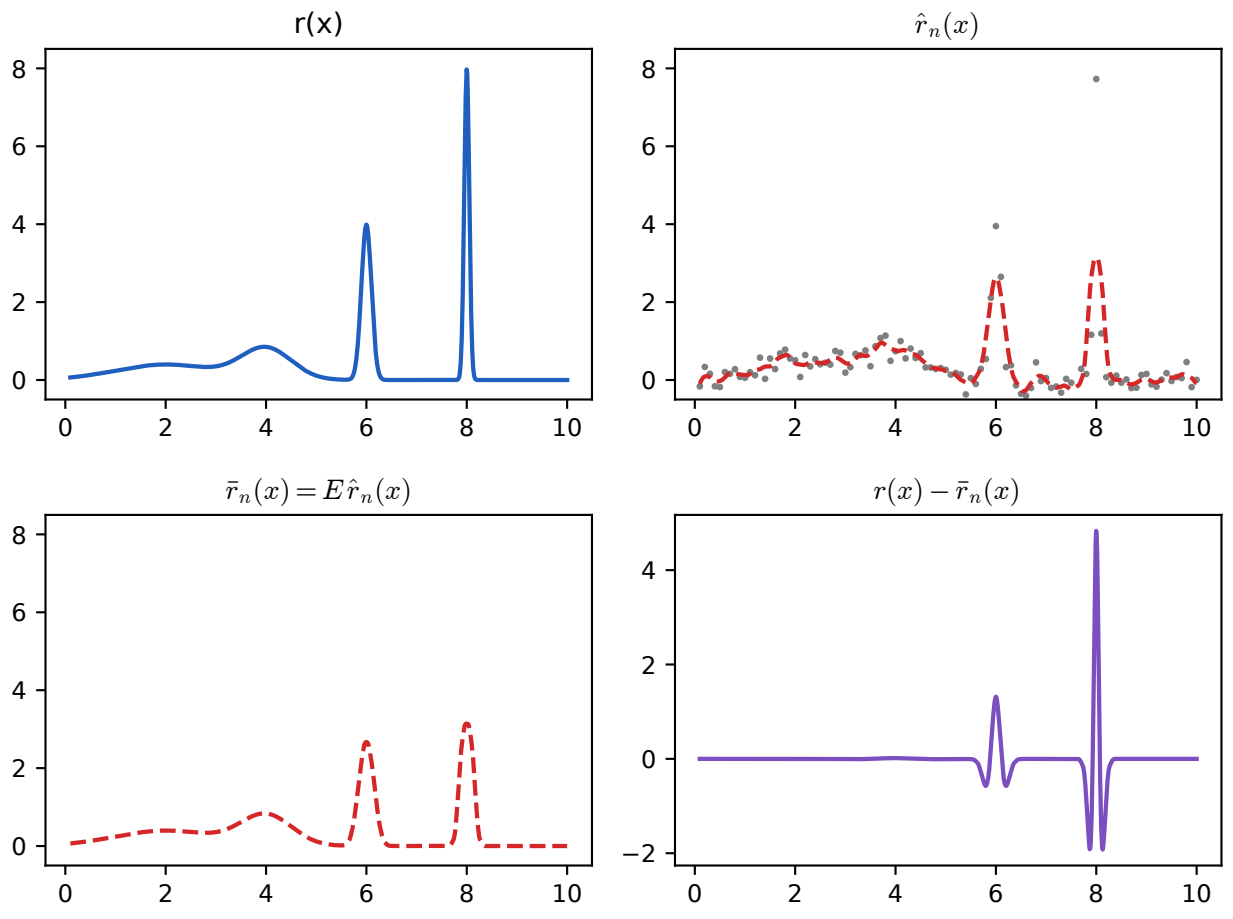

r(x)
$\hat{r}_n(x)$
$\bar{r}_n(x) = E\hat{r}_n(x)$
$r(x) - \bar{r}_n(x)$