



$p(y = \text{cat}|\mathbf{x}) = 0.90$
 $p(y = \text{dog}|\mathbf{x}) = 0.05$
 $p(y = \text{horse}|\mathbf{x}) = 0.05$

+



noise

=



$p(y = \text{cat}|\mathbf{x}) = 0.05$
 $p(y = \text{dog}|\mathbf{x}) = 0.05$
 $p(y = \text{horse}|\mathbf{x}) = 0.90$