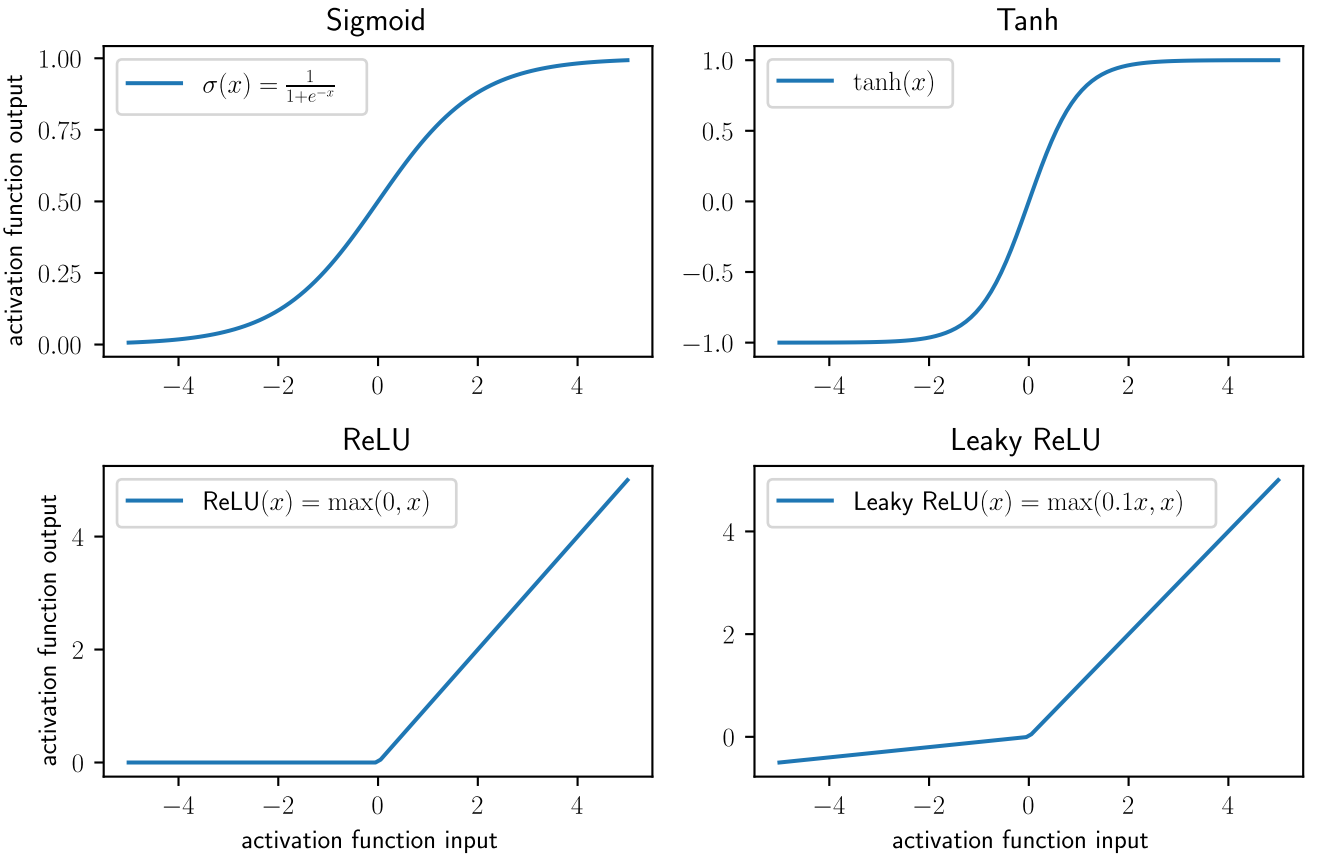
Examples of activation functions for neurons in the hidden layers
Sigmoid
$\sigma(x) = \frac{1}{1+e^{-x}}$
activation function output
1.00
0.75
0.50
0.25
0.00
−4
−2
0
2
4
Tanh
$\tanh(x)$
1.0
0.5
0.0
−0.5
−1.0
ReLU
$\mathrm{ReLU}(x) = \max(0, x)$
activation function output
activation function input
Leaky ReLU
$\text{Leaky ReLU}(x) = \max(0.1x, x)$
activation function input