

## Notation

$x$	A vector
$X$	A matrix
$X$	A Tensor
$X_{ij}$	Element located at row $i$ column $j$ in matrix $X$
$*$	The convolution operator
$\circ$	The Hadamard product
$\sigma$	The sigmoid activation function
$\nabla_x f$	Gradient of $f$ with respect to $x$
$f(x; \theta)$	Function $f$ with input $x$ and parameter $\theta$