Notation

The notation used throughout this thesis is summarized below

- x: A scalar
- $\boldsymbol{x}$: A vector
- $\boldsymbol{X}$: A matrix
- $\mathbb{R}$: The set of real numbers
- $\nabla_x f$: Gradient of f with respect to x
- $\frac{\partial y}{\partial x}$: Partial derivative of y with respect to x
- $\mathcal{O}$: Big O-notation
- $\odot$: Element-wise multiplication