

Notations

mn

Contents

1 Notations

1

1 Notations

Vectors: $\mathbf{v} \in \mathbb{R}^n$ or $\mathbf{v} \in \mathbb{R}^{n \times 1}$ — n rows and 1 column.

Matrices: $\mathbf{M} \in \mathbb{R}^{n \times m}$ — n rows and m columns.

- row vectors:
- 1 layer network:
 - Input dimension: D_x ($\mathbf{x} \in [N, D_x]$)
 - Hidden units: H ($\mathbf{W}_1 \in [D_x, H]$, $\mathbf{b}_1 \in [H]$)
 - Output dimension: D_y ($\mathbf{W}_2 \in [H, D_y]$, $\mathbf{b}_2 \in [D_y]$)