List of symbols

- $\mathbb{R}$: the set of real numbers

- $\mathbb{R}_+$: the set of nonnegative real numbers

- $\mathbb{Z}$: the set of integer numbers

- $\{0,1\}^n$: is the cartesian product of n copies of the set $\{0,1\}$

- Let $a \in \mathbb{R}$, $\lfloor a \rfloor := \max\{c \in \mathbb{Z} : c \leq a\}$

- Let $a \in \mathbb{R}$, $\lceil a \rceil := \min\{c \in \mathbb{Z} : c \geq a\}$

- $\mathbf{1}$ is a vector with all the components equal to 1

- $|U|$ is the number of elements beloging to the set U

- Let V be a set and $S \subseteq V$, define $S^c := V \setminus S$.