

Notation	Meaning
$\mathbb{O}$	a set of uncertain objects
$\mathbb{I}, \mathbb{E}$	Indoor space, Euclidean space
$ p, q _I$	Indoor distance between $p$ and $q$
$ p, q _E$	Euclidean distance between $p$ and $q$
$ p, q _K$	Skeleton distance between $p$ and $q$
$a.l$ or $a.u$	lower or upper bound of the value $a$
$\uparrow A$	the link/pointer to the entity $A$
$[R_i^-, R_i^+]$	the range for $R$ on dimension $i$
$len(R_i)$	$ R_i^+ - R_i^- _E$
$D(p)$	doors of partition $p$
$P(d)$	partitions connected to door $d$
$P(q)$	the partition containing point $q$
$P(O)$	partitions overlapping with object $O$
$ O $	the number of instances belonging to object $O$
$a \overset{*d}{\rightsquigarrow} b$	a path from $a$ to $b$ with $d$ as the last door
$a \overset{*}{\rightarrow} b$	the shortest path from $a$ to $b$
$\odot(c, r)$	a circle centered at $c$ with radius $r$