

Table 1: List of Major Notations Used in the Paper

Notations	Descriptions
$\mathcal{G}(\mathcal{V}, \mathcal{E})$	the directed graph with nodes \mathcal{V} and edges \mathcal{E}
\mathcal{V}	the set of nodes
\mathcal{E}	the set of edges
\mathcal{C}	the impact on whole team’s probability of arriving on time
\mathcal{R}	the set of robots
$(\mathcal{O}, \mathcal{D})$	the origin-destination pair of corresponding robot
\mathcal{T}	time budget of task for corresponding robot
\mathcal{I}	the importance of task for corresponding robot
ϕ	the set denoting all the possible policies
λ_i	the weight of importance
$\mathcal{P}_i(\phi)$	the impact on each agent’s probability of arriving on time
$\mathbb{H}(X)$	information entropy of the map
w_i	the word is indexed as i in the dictionary
\mathbf{v}_i	the center words
\mathbf{u}_i	the context words
e_{ij}	the attention coefficient of neighbours
W	the learnable weight matrix used for linear transformations
\mathbf{a}	a vector used to calculate the attention coefficient
\mathcal{N}_i	the set of neighbouring vertices of node v_i
α_{ij}	the normalized attention coefficient
$(\mathbf{h}'_i, \mathbf{h}''_i)$	feature representations
θ_{ij}	the parameter vector of policy
$\pi_{\theta}(a s)$	the policy under state s
J_{θ}	the objective function of our algorithm
$G(\tau)$	the cost function of robots
$J_{\mathbb{P}}$	the objective function of probability
$J_{\mathbb{H}}$	the objective function of information entropy