

Symbol	Description
T_p	a set of m time-constrained spatial tasks t_j at timestamp p
W_p	a set of n dynamically moving workers w_i at timestamp p
e_j	the deadline of arriving at the location of task t_j
$l_i(p)$	the position of worker w_i at timestamp p
l_j	the position of task t_j
X_i	a set of skills that worker w_i has
Y_j	a set of the required skills for task t_j
d_i	the maximum moving distance of worker w_i
B_j	the maximum budget of task t_j
I_p	the task assignment instance set at timestamp p
CT_p	a set of tasks that are assigned with workers at timestamp p and can be completed by these assigned workers
C_i	the unit price of the traveling cost of worker w_i
c_{ij}	the traveling cost from the location of worker w_i to that of task t_j
S_p	the score of the task assignment instance set I_p
ΔS_p	the score increase when changing the pair assignment