

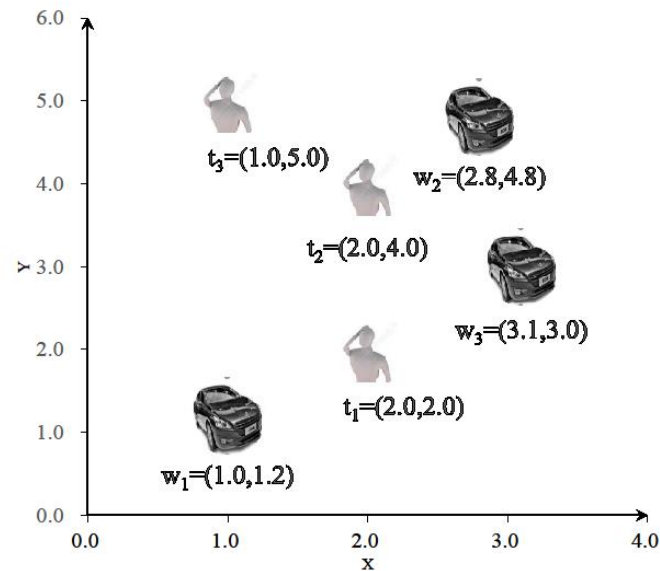
Revenue-Maximizing Online Stable Task Assignment on Taxi-Dispatching Platforms

Jingwei LV, Ze ZHAO, Shuzhen YAO, Weifeng LV

Frontiers of Computer Science, DOI: [10.1007/s11704-021-0363-3](https://doi.org/10.1007/s11704-021-0363-3)

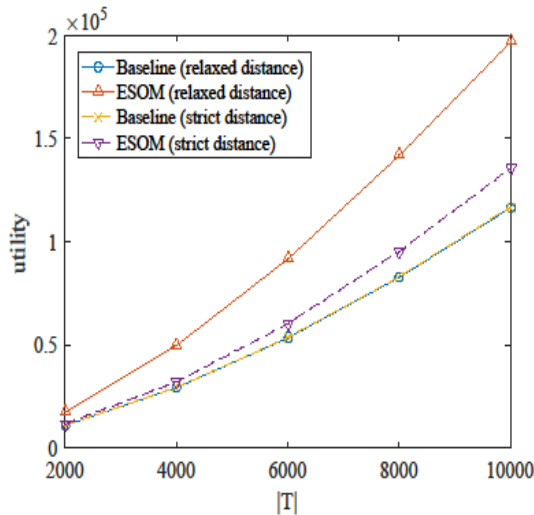
Problems & Ideas

- Problems of task assignment on taxi-dispatching platform for higher profits
 - Online Scenario
 - Stable Assignment
- Ideas: Substitutable
 - Relaxed Distance
 - Selection Strategy

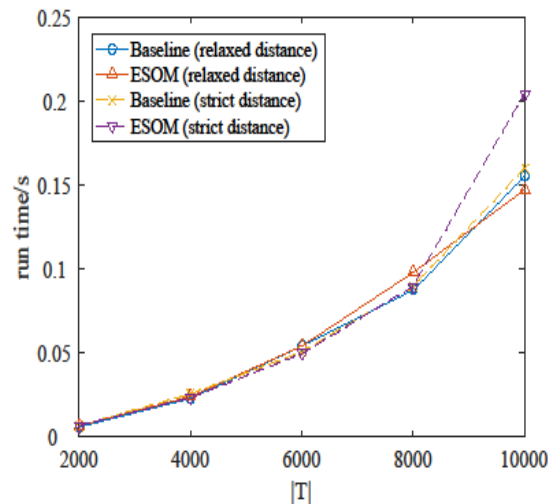


Main Contributions

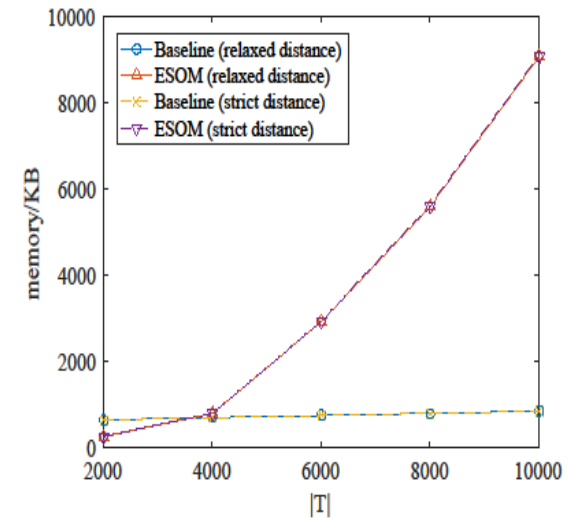
- **utility**



- **Run time**



- **memory**



We identify a problem about dynamic task assignment, called RMOSM Problem, then introduce the concept Substitutable and design a novel algorithm Equation-Substitutable Online Matching (ESOM). Finally we conduct experiments that verify the efficiency and effectiveness of the proposed approaches.