

A taxonomy for task allocation problems with temporal and ordering

Taxonomy

ST-SR-TA-TW

Hard Constraints

- Typically assume there are more tasks than robots and the tasks are known in advance
- Require time extended assignments and have time window constraints on task
- Composed of two sub-problems
 - Assignment problem to find the assignment that optimizing the objective function
 - Task sequencing problem to find feasible orderings of tasks that result in optimal assignment
 - Scheduling problem to assign times to tasks in a way the optimize the objective function