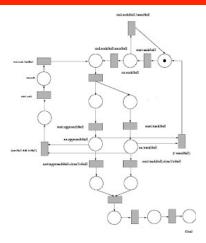


PROJECTS LIST

Lab day: Thursday

Supervisor: Pedro Lima



13. Petri-Net-based or FSA-based Coordination of a 2-robot Task

[this project may be particularly interesting for a group including one MEIC student]

Goal: Two real robots will cooperate to execute a task (to be defined by the group, e.g., transportation of large object, or distributed execution of subtasks concurrently when they can be parallelized).

Method: The steps of the executed *task* at each robot, the synchronization steps and all other coordination mechanisms will be designed as a Petri net or a Finite State Machine (TBD by the group). The group will be challenged to provide a comparative study of the system performance *vs* the predicted performance using Stochastic Petri Net or Stochastic Automata task modeling.