Call for applications for a post-doc / research engineer position at Grenoble Institute of Technology, G-SCOP Lab (https://g-scop.grenoble-inp.fr/en)

The position is open for 12 months, funded on a research project on Material Handling System Design, configuration and management.

The ANR funded project LADTOP develops methodologies to design and configure Material Handling Systems that implement emergent technologies as Autonomous Mobile Robots, Cobots etc. The project developed a structured database supporting MHS design processes linking specification activities with alternative design generation, simulation models’ creation or multi-criteria decision-making techniques. It involves works on Model-Based Systems Engineering, Constraints Satisfaction Problem modeling, Discrete Event Simulation and Multi-Criteria Decision Making. This position is open to contribute to the system management processes. In few words the challenges on the topic are:

- **System/Fleet management**: to define algorithm to manage a Material Handling System at the operational level. It is about defining rules for equipment positioning and mission affectation/scheduling in a dynamic environment for heterogeneous fleet of Material Handling Equipment.
- **Digital Twin of Material Handling System**: to define appropriate technique to obtain an operational digital twin of an intralogistics system cooperating with the fleet management system.

The proposals are to be tested on a real system in the Operations Management platform of the lab. This platform emulates an assembly production system deploying emergent technologies.

The expected profile:

- Knowledge in industry 4.0 and curiosity in AI techniques
- Operational research as Linear programming, constraint programming or any optimization method
- Programming skills (python or similar languages)
- Simulation of production systems

Starting date: as soon as possible, but not later than September 1st, 2023

Duration: 12 months

Deadline for applications: May 30, 2023

Application: CV, list of publications, cover letter, recommendation

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