

$\begin{array}{c} {\rm SY02} \\ {\rm UTC~LaTeX~report} \end{array}$

John DOE

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1. Introduction

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2. System Overview

2.1. Autonomous Vehicle



Figure 1: Autonomous vehicle of the Heudiasyc laboratory

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2.2. Scheduling Constraints

Availability

Each task can only start after its release date:

$$T_i \ge r_i \quad \forall i \in \{1, 2, 3, 4, 5\}.$$

Deadline

Each task must be completed before its deadline:

$$T_i + p_i \le d_i \quad \forall i \in \{1, 2, 3, 4, 5\}.$$

Non-overlapping

For any pair of tasks J_i and J_j with $i \neq j$, task J_j must not start within the execution interval of task J_i . This is expressed as:

$$\forall i, j \in \{1, 2, 3, 4, 5\}, i \neq j, T_j \notin [T_i, T_i + p_i].$$

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