Automated Verification of Cyber-Physical Systems
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Project Description

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1 How to Send It

You must send by email to `igor.melatti@univaq.it` a single file `AVCPS_2025_2026_StudentId.zip` (in case the project is a group project, you should write all student ids separated by underscores _), which must contain a single directory `AVCPS_2025_2026_StudentId`, with the following content:

- a PDF file `description.pdf` with:
  - name, surname, student id (matricola number) for each student in the group;
  - a description of how the project was designed and implemented;
- a PDF file `slides.pdf`, containing slides to present the project;
- a directory `project` with all implementation files, with a suitable sub-directory organization.

You may speak and share opinions with other students not in the group. However, each group must present a distinct solution.

2 Project Description

Implement all the algorithms for statistical model checking described in the slides of lesson 17 (slide 87 and from 116 to the end). Assume that a system simulation is performed by invoking Docker on a `main.sh` file, e.g., `docker run bash main.sh`. Provide at least one example, e.g., by verifying an example taken from Simulink or OpenModelica.