Stochastic Simulations

Fall Semester 2024

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Project Rules

1. For the given project, complete the listed tasks and prepare a short report describing the solution method and the results you have obtained. Make sure that the report contains answers to all points mentioned in the project description, as well as an analysis/discussion of the results you have obtained. Motivate carefully every argument/statement as well as the choices you have made, for example, for the sampling routines. The length of the **report should not exceed 12 pages**. Attach an extract of the code, which should be well commented, at the end of the report (not counted in the 12 pages). **Recall that the project counts for 40% of the final grade**.

2. The overall project evaluation will consider theoretical knowledge, programming/post-processing quality, critical thinking and the clarity and organization of the report.

3. Please disclose the use of ChatGPT or similar AI assistance you used to complete your project.

4. To submit your project, upload both a `.pdf` file of the report and an archive (`.zip`, `.tar`, or `.rar`) containing all `.py` and `.ipynb` files that you have used to the course's Moodle website.

5. There are 11 projects to choose from. Projects **MUST** be done individually or in teams of at most 3 students. There can only be **at most 3** teams working on the same project.

6. In addition, you are also allowed to design and implement your own project. Please contact Prof. Nobile as soon as possible should you choose this option.

7. Registration for the projects will open on **Thursday, November 28th** at noon. Each project has three slots. Therefore, **only one of the team members** must select the project from the Moodle website. Projects will be allocated on a first-come-first-serve basis. Following that, please send an email with your name and the name of your partners to the teaching assistant.

8. You can prepare the report with your favorite text-editor, although we strongly recommend using LaTeX.

9. Deadline for choosing the project: **Monday, December 16$^{\text{th}}$, 2024 (included)**.

10. Deadline for submitting the report: **Thursday January 16$^{\text{th}}$, 2025 (included)**.