Spring 2019

Stanford
AA203: Introduction to Optimal and Learning-based Control

Final project guidelines

Project Description: Your project should be related to the range of topics covered in this class. Although not required, it is preferable that you pick a topic related to the material presented in the second part of the course (i.e., after the midterm exam). In your project, you should apply tools from optimal and learning-based control to a problem that interests you, try to benchmark/improve an existing algorithm, or even develop a new one! Of course, if you are already working on a research project that optimal and learning-based control might be applicable to, then working out how to apply the tools covered in this class to it will likely make a very good project topic.

The project entails writing a project report (4 pages) and preparing a poster presentation. You can work in a group of up to three people.

Timeline: We encourage all of you to discuss with Prof. Pavone and the CAs the selection of the topic of your project. Specifically, this is the timeline for the final project:

- **Project discussion phase**: discuss with Prof. Pavone and the CAs your project ideas during office hours, until Thursday, May 2nd.
- **Project proposal**: by Monday, May 6th, send to the address "aa203staff@lists.stanford.edu" a paragraph (≈ 300 words) describing your project idea. The following information must be included: title, names of the team members, clear description of the problem that you wish to study, and relation of your project to your current research (if any).
- **Project approval**: on Wednesday, May 8th we will send you an email telling you if your project idea is approved or if (and how) you should modify it.
- **Poster presentation**: you should present the poster about your project on Friday, June 7 (logistical details will be provided in May).
- **Project report**: you should submit your project report (4 pages maximum) by Monday, June 10. The project report should be emailed to "aa203staff@lists.stanford.edu".

Project evaluation: Your project will be evaluated along two main dimensions:

- Technical quality of your work (60%).
- Clarity of your poster presentation and final report (40%).

Publishing your work: Some of the research-oriented projects might contain publishable work. Prof. Pavone and the CAs will be happy to help you with turning your work into a scientific publication.