Course project essentials

1. Team project

- The course project is the team activity, so you have to form a team to work on the chosen project topic.
- The acceptable number of students in one team is no less than 3 and no more than 5 students.
- Every team has to submit a project proposal before the deadline (see important dates below).
- The results of your project are:
  - a **presentation** will present at the end of the course;
  - a **GitHub repository** with the code to reproduce your results;
  - a **report** that describes your work in details.

  More details about the report and presentation will be provided later. For reference, see presentations and repositories from the last year projects here.

2. Important dates

We expect you to start project idea discussions with your coursemates during **the very first week**. This will greatly help you plan workload, prepare a refined and nice project proposal, oil the path for a great project and make your life easier.

- **Friday, November 26, 2018**

  You need to write project proposal by this date. Proposal is a brief description of what you as a group are going to work on. Please see more details in the next section.

- **December 20, 2018**

  Project presentation will take place on December 20.

3. Project proposal

The write-up should take 2-3 pages. We will use your submissions to give each team an individual feedback about your ideas and directions. Proposal submission will be enabled via Canvas. One submission per team is OK. We also suggest you focus on proposal contents based on the type of project:

- **Established problems**

  Those of you who choose to work on well-known tasks with existing datasets and published baselines should be focusing on their technique and its novelty rather than an extensive explanation of the task.

- **New tasks**

  We are super excited to see your creativity in action! Proposal of a new task should explain and motivate it, discuss data-related issues and possible baselines.

In either case the structure is roughly the same:

1. **Project name**
2. **Team**

   Team members. How tasks will be allocated among them?

3. **Background**

   Why is the problem worth attention? And how linear algebra is going to solve it?

4. **Problem formulation**

   Define the problem formally, specify necessary equations/models.

5. **Data**

   Tell us about the datasets you will be working with here.

6. **Related work**

   What has been done on this topic? Google Scholar might be helpful :)

7. **Scope**

   What will be the end result of the project? Describe what phases of work will be undertaken.

8. **Evaluation**

   How do you measure the performance of your solution? It is also a good place for including baselines.

9. **References**