CMSC702 Project Guidelines

Description:
There will be a semester project for this class. The specific focus of the project will be left up to you however the project should be one of the following types:

- A tutorial on using a computational genomics algorithm/tool - provide detailed derivations and background information on the core algorithms and key concepts that can be easily understood by someone outside the field
- Replicate a subset of results in a paper using provided tools or a new (improved) set of tools/algorithms.
- Re-implement a computational genomics algorithm in another language or using different tools
- Propose a novel risky project of your own design

You will be given a lot of freedom to devise your own research project however all final project plans must be approved by the instructor.

Requirements:
- Teams will consist of 1-3 people.
- Have 4 short meetings (20-30 minutes each) with the instructor/TA throughout the semester to provide project updates and discuss any problems that arise. At least 2 meetings should be with the instructor.
- Final project report should contain at minimum the following sections (introduction, methods, results).
- Each team will be expected to give a short presentation on their project (10-15 minutes) at the end of the semester.

Timeline
Below is a timeline of the project and milestones that we expect everyone to adhere to. TBD designates, to be determined as the semester progresses. Obviously, these TBD dates will not be beyond the end of the semester.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Find a group</td>
<td>February 11</td>
</tr>
<tr>
<td>Select a project</td>
<td>March 3</td>
</tr>
<tr>
<td>Progress updates</td>
<td>March 3 – April 29</td>
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<tr>
<td>Turn in project report</td>
<td>TBD</td>
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<tr>
<td>Group presentations</td>
<td>TBD</td>
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Grading:
This project will count for 35% of your overall grade for the class. As we encourage high-risk high-reward ideas, it is okay if your results do not beat the state-of-art. In this case, you should include an explanation in the report on why you think the proposed idea did not beat the state-of-art.

Grading will be distributed in the following manner:
- 30% one-on-one progress meetings
  - You will be graded on your preparation
- 40% final report/tutorial
- 30% final presentation