Projects 2021

Introduction

Students will do this project in groups of 2 (with permission, a group of 3 might be allowed). Each group should choose a topic (or develop one on their own). Each topic can be investigated by only a single group –first come, first serve. To indicate which project you want to do, please reply in the chat channel.

Note that the projects themselves are all open-ended.

Report Structure:

Introduction:

This should include an introduction to the question you are looking into. As the project are often flexible and open-ended, the introduction should be specific to what you did, and clearly indicate what question **your report** will answer. It should also include references to the most important literature on the topic.

Model:

A clear description of the model you will be studying, including all parameters. Make sure all variables are defined.

Methods:

A clear description of the methods you used in the report.

Results and Discussion:

A clear description of your results, including figures. Your work should always be compared to literature, and should include a discussion on what you were expecting in comparison to what you found.

Conclusion:

A summary of your main results, and an outlook on what you think might be interesting to look into in the future, or future improvements.

** Note that depending on the topic, it might also be good to include a "Theory" section. For some reports, it might be sufficient to include the theory in the intro and results sections. This depends on how much background theory you use in your report.

Grading the Report:

The report will be graded with the following topics in mind:

- -Clearly stated goal
- -Clearly presented introduction
- -Clear introduction to any theory used in the report
- -Clear introduction of model, and all relevant parameters
- -A clear description of the methods used in the project
- -Results: validity/accuracy, presentation, description
- -Discussion: clear, logically based on the results, connection to previous literature
- -Conclusion: clear, based on rest of report
- -Outlook: logical
- -References: are all important papers referenced? Is the referencing done correctly?
- -Language: Is the report clearly written? Grammar, etc.
- -Figures: Are figures clear, readable, well described in the text, axes clearly labeled
- -Units: Are units included everywhere, and included correctly? (Dimensionless units are usually preferable.)

Grading for Report

The report will be graded with the following topics in mind:

- Clearly stated goal
- Clearly presented **introduction**
- Clear introduction to any **theory** used in the report
- Clear introduction of model, and all relevant parameters
- A clear description of the **methods** used in the project
- **Results**: validity/accuracy, presentation, description
- **Discussion**: clear, logically based on the results, connection to previous literature
- Conclusion: clear, based on rest of report
- Outlook: logical
- **References**: are all important papers referenced? Is the referencing done correctly?
- Language: Is the report clearly written? Grammar, etc.
- Figures: Are figures clear, readable, well described in the text, axes clearly labeled
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