Final Project

Presentation Tips

November 13, 2022

Objectives

- provide deeper understanding and hands-on experience with a specific topic related to our course material

- improve project skills: project proposal, independent learning, project execution, and presentation (both oral and written)

General Requirements i

- You do not need to develop any new theory, but you must present a sufficient review of the topic suitable for understanding by your colleagues in the class.

- You should conduct experiments to illustrate the concepts. You can develop your own code or use existing software that you find on the web. The project is not intended as a test of your programming skills. Rather it should use your engineering / experimentation / analysis / interpretation skills.

General Requirements ii

- You should cite all references and resources that you use for your project. See the bibliographies of any published papers in journals or conference proceedings, for examples of the proper ways to cite papers.

- Students will give a short presentation of their project to the class. Details are provided below.

- Students will submit a report on the project at the end of the semester. Details are provided below.

Submission Schedule

Presentations on December 12, 2022

- About 20 minutes total per group
    - 15 minutes for presentation
    - Remainder for questions
- Use the projector
    - Submit your slides (in ppt or pdf) and project reports (in pdf) before December 11, 2022

Content of Presentations and Reports

- Presentations should focus on the most interesting, challenging, or important aspects

- Describe your project in such a manner that a person who is familiar with the class material, but not your specific topic (ie, other students in the class), can follow your description

Report Outline i

- Introduction
  - Topic, motivation, problem domain, assumptions
- Previous work (in the introduction or a separate section)
  - Describe previous works briefly and give some explanation of how they fit your topic, is relevant, or is deficient, etc.
- Detailed description
  - The algorithms, implementation, and testing procedures
  - Describe programming implementation and the use of existing software tools

Report Outline ii

- This description (together with your source code in appendix) should be detailed enough for a reader to understand, use, and revise your code.
- Experiments and results
  - Show and describe images, data, results
  - Put quantitative results in tables or graphs (using statistics)
- Discussion
  - Achievements, limitations, and possible future work
  - Where does it work well, and where does it fail? What would be needed to improve the results?

Report Outline iii

- References. List of papers cited in the text. Use a consistent citation style - see examples of styles in published journal or conference papers.

- Appendix with any code you developed.

Notes i

- Reports should be written in such a manner that a person who is familiar with the class material, but not your specific topic, could learn the topic from your report.
- Reports should be about 4 pages at least, not including appendices.

Project Grading

- 20% Presentation. Clarity and completeness of the presentation
- 20% Soundness. Technical soundness and accuracy of project.
- 20% Organization and completeness of the report, adherence to guidelines above.
- 20% Clarity of the report.
- 20% Depth and sophistication of project. How difficult or involved was the algorithm analysis or implementation.