

Final Project Guidelines

Time:

12:00pm Friday (05/11): Final projects due

Materials to turn in:

1. Presentation slides
2. Source code with documentation
3. Project reports

The source code must be complete so that it can be compiled and run on CRC cluster. The source code documentation must have the compilation instruction and the description of program functions and data structures.

Please hand in everything electronically as well as hardcopies of 1 and 3. You can put hardcopies in my mailbox.

The project report must have the following elements:

Title

Introduction

The introduction describes the topics, the main scientific concept of the problem and the goal of the project.

Algorithm Design

This section should begin with the description of the mathematical model you use, the numerical algorithm to solve the model, and the theoretic analysis of the performance of the proposed algorithm.

Results

The strategy to test the algorithm should be explained. The benchmark problems to test the algorithm and the simulation results must be clearly stated.

The performance metrics should be given and be compared with theoretic results. If there is discrepancy, what could be the possible cause?

Concluding Remarks

This section provides a summary of your findings and avenues for future work.

References

Your report should be **completely self-contained**, meaning that we should not need to look at any outside references to understand what you did. The report is expected to be around **5-10 pages**, but this is only a guideline. You should write the amount you need to fully express your ideas in a clear and precise manner. Also, **use diagrams and figures** to make sure that you convey the content clearly.