

Lab Project

Instructor: Rong Qin

Due Dec 5th on Blackboard by 5 pm.

The objective of this project is to work with some interesting applications of linear algebra. Choose **one** topic and answer every question in that topic. Solving the problem via MATLAB is highly encouraged but you are not required to turn in your code. You must explain how you implemented MATLAB

Grading

The paper should be about 2-3 pages long, double spaced. The 2-3 pages is a loose requirement. I care mostly that your paper is clear and descriptive. A fellow classmate who worked on a different topic should be able to understand your paper. The grading rubric is as follows:

1. **Background (10 points)** This is a discussion of how the mathematical and non-mathematical portions of your topic fit together. The objective here is to discuss which information is needed in order to do the associated problems and how linear algebra fits into the picture. You might include the definitions of words, the linear algebra concepts used (i.e., matrix multiplication, solving linear systems, etc), and some explanation about why these ideas were useful.
2. **Solutions (25 points)** You must include the solution to all problems in the project description. Don't just give answers, a full detailed explanation of what you're doing at each step is required.
3. **Organization (5 points)** Is your report readable and easy to follow? Include a couple images or graphs if necessary.
4. **Bibliography (5 points)** List the references used to complete the report. You may use your favorite style guide for the bibliography. *You are required to include at least two references.*

Any questions about the instructions or grading of the project should be brought to me as soon as possible.