EE510 Linear Algebra for Engineering
(Spring 2023)
Final Project
Due dates:
Project presentation April 24th and 26th, 2023
Project report May 9th, 2023

Final project consists of:
(1) in-class *project presentation* (15 minutes per project) based on at most 15 slides containing the description of your project topic, approach and concrete results;
(2) *a 4 page project report* describing your project topic, main achievements, approach (algorithms, investigated assumptions, tradeoff analysis) and experimental results.
The project presentation should be submitted via email to us (Paul Bogdan <pbogdan@usc.edu>, Qi Cao <caoq@usc.edu> - please send to both addresses to ensure we receive your PPT presentation and project report (PDF version) for grading).

The *project presentation* (no more than 15 slides though!) should provide the following information:
   • Overview of the project (1 slide) **(1pt)**
     - What problem are you trying to solve? (E.g., provide problem statement and the motivation. Where it can be used? What are the benefits?)
   • Discuss the relevant work (1 slide) **(4pts)**
     - What is the relevant work on this topic?
   • Approach and concrete results (e.g., 10-12 slides) **(40pts)**
     - Introduction of the main approach used in the project
     - Figures of main results
   • Conclusion and possible future research directions (1 slide) **(5pts)**
     - What are your main achievements?
     - What are the main lessons learned?
     - What are some possible directions you would pursue if more time would be available?

Hint: Please refer to the above-mentioned structure to better organize your presentation. And remember, you need to keep the presentation within 15 slides and at most 15 minutes! Keep in mind that the quality and content of slides, overall timing of your presentation, clarity of presented examples, ability to handle Q&As are all very important for conveying the key points to the audience.

For the *project report* (**4 pages** - two-column format, 12 pt. fonts, single spaced lines - including text, figures, tables, references, etc.) make sure to contain the following information:
   • Title of project and list of author(s) including email addresses **(1pt)**
   • A short abstract **(14pts)**
   • Introduction and motivation **(20pts)**
     - Give an informal description of the problem.
     - Summarize the main challenges
     - Mention what is novel about your project.
   • Approach and concrete results **(155pts)**
     - Introduce the approach (e.g., assumptions, algorithm, investigation strategy, etc.)

- Main results of your project (e.g., figures of the main results, observations of the results, etc.)
- Conclusions (**10pts**)
  - Summarize your main ideas & findings. Summarize individual contributions throughout the entire project, by clearly and accurately identifying the parts accomplished by each member.
  - What is the anticipated outcome/impact of your work?

Remember these guidelines to organize your presentation and project report.

The report must be emailed to <pbogdan@usc.edu> and <caoq@usc.edu> **by May 9th 11:59pm, 2023**

Good Luck!