Course project

Deadline for proposal: March 27, 2018.

Presentations: Dead Week

Deadline for final document: May 3, 2018

There will be no final exam in EE525X. Instead, 40% of your total grade will depend on satisfactory completion of a {course project}.

The project is open-ended in scope and duration. The only criterion is that it should involve design and/or analysis and/or implementation of a data processing method (or methods) in some nontrivial manner. Here, "data processing" can be construed as broadly as you like.

Acceptable projects include:

  (i) learning about a new technique, implementing, and testing on actual data; or

 (ii) addressing a specific engineering data analysis problem, and developing a data analytics method to solve that problem; or

(iii) a thorough literature survey on the state of the art in a specific area of data analytics.

Combining all of these aspects will likely make an excellent project.

Projects are conducted in teams of one (1) or two (2) students. (Solo is fine, but I would strongly encourage groups of 2.)

Your time is valuable; therefore, it is particularly beneficial for you if you can align the aims of the project with your own research. Not only will you be spending your time fruitfully, but it also will be an opportunity for the rest of the class to learn about your field.

For a well-planned and well-executed project, I expect a level of (sustained) effort of about 2 weeks. That should give you some idea of how advanced the project should be.

Deliverables

A project proposal (two pages at most) will be due on Canvas on March 27. The proposal should contain the names of all team member(s), a tentative title, a detailed description of the goals of the project, and a roadmap as to the steps you will take to achieve these goals. The proposal is worth 10% of your overall grade. Plan well and demonstrate that you have invested enough thought into planning the project.

A short project presentation in class is due in Dead Week. Each presentation will be no more than 10 minutes long (with a strict slide limit of 10 slides.) The presentation is worth 10% of your grade.

The final project report will be due on Canvas on May 3. Reports should be around 10 pages long. The project report is worth 20% of your grade.

In terms of formatting the report: use your best judgement as long as it is readable and gradeable.

In terms of content: describe the problem in some detail, and explain what you intended to do and what you accomplished. Reports should be written in the usual style of scientific writing: a brief but succinct introduction, literature review (if any), main contributions of the project, results, and an optional conclusion.