ME 599 Software Development for Engineering Research (Spring 2020)

Project Presentation Guide & Rubric

The presentations on your software projects should be around 10 minutes each, with 5 minutes for questions and switching to the next presenter.

Presentation guidelines

- You can use any presentation tool you prefer: Keynote, Powerpoint, Beamer, reveal.js, Google Slides, or anything else. Feel free to use your research group's presentation template, if they have one. Otherwise, create your own (or use a default style). I encourage you to treat this like a (relatively short) conference presentation.
- In your presentation, you should talk about the motivation for your project, give any relevant background or theory, discuss the software design (e.g., functionality, modules, dependencies), show results (which may be preliminary), and discuss conclusions/future work/how this fits into your research.
- Please follow presentation best practices:
  - Consider your audience. Most of the audience here will not be familiar with specifics of your work or even your research area.
  - Try to reduce your reliance on text-only or text-heavy slides, and instead use images, diagrams, screenshots, etc. A good rule of thumb is to not have two text-only slides in a row.
  - Remember that people cannot read and listen at the same time. By eliminating or minimizing text, you make it much easier for the audience to listen to you.
  - Keep your layout simple; make sure you keep plenty of empty space and don't clutter your slides.
  - Be consistent with your choices (color, font, etc.)
  - Please do not use uninformative clip art. Emoji, on the other hand, are fine when used cleverly 👍
  - Rehearsing your talk will make you more confident in what you plan to say, and thus more comfortable in removing text. Also, remember that you are the expert on your work!

Rubric

Presentation Element	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Presentation style	Presentation is not rehearsed, with frequent stumbles and/or breaks to think of what to say	Presentation goes smoothly, with only occasional stumbles	Presentation is clearly well-rehearsed and planned.
Formatting & aesthetics	Presentation is dominated by text, with few or not informative figures. Inconsistent or jarring style choices. Frequent errors/typos in the slides.	Presentation has some figures, but mostly relies on text-heavy slides. Some thought put into styling. Few typos/errors.	Consistent and well-thought-out use of styling; good balance of figures and text. No typos/errors in the slides.
Timing	Presentation is far too short or far too long.	Presentation ends a few minutes short or takes a bit too long.	Presentation is designed to be just about 10 minutes long.
Introduction & Motivation	Fails to provide an overview, discuss relevant literature, and define the scope of the work	Provides an adequate overview, discussion of literature, and explanation of the scope of work	Provides a thorough overview and discussion of literature, and thoroughly defines the scope of work
Background / theory	Fails to discuss the ideas behind the software, or explains the relevant ideas at a level not understandable by the audience. Uses too many equations.	Briefly discusses the theory or background behind the software. May rely a bit too much on equations, or some jargon.	Thoroughly discusses the necessary background to understand how the software works, at at understandable level.
Software Design	Fails to describe equations and tools used	Adequately describes equations and tools used	Thoroughly describes equations and tools used
Results	Fails to show any results or examples of the software in action	Shows some results or examples of the software in action	Thoroughly presents results and examples of using the software, and connects to research
Conclusions	Fails to summarize work and/or connect to research	Adequate summary of work, future plans, and connection to research	Thoroughly summarizes project and future work, and gives good connection with ongoing research