Paper Presentations and Hands-On Demos

Paper comprehension and presentation are important skills for research and development, and paper presentations will introduce the class to a wide variety of haptic systems. Each team will give an 8- to 10-minute paper presentation to the class via a pre-recorded lecture, and a brief hands-on demo during an interactive session.

Choose your Team (due Thursday 5/28, 11:59 pm PDT)

A team has 2 or 3 members. To help you form a team, you can use the "Search for Teammates!" feature in Piazza, and/or look at the People page for the course on Canvas. Select a team such that at least one person on the team is available and has the technology required to give the live hands-on demo at the interactive session from 9-10 am on Tuesday, June 2 or Thursday, June 4 (more on this below).

As soon as you have formed your team:

- 1. Enter the names in this Google sheet: https://tinyurl.com/ME327-Spring2020-Teams. If desired, you can enter your preference for showing a hands-on demo on Tues or Thurs, and we will try to optimize. (We will announce the schedule on Friday 5/29.)
- 2. In Canvas, add yourself to the appropriate group: In Course Navigation, click the **People** link, then the **Team** tab. Scroll to find the same team number that you signed up for on the Google sheet, e.g. "Team 15" if your Team # was "15" in the Google sheet. Click the **Join** link for that group. A message appears at the top of your browser verifying you signed up for the group.

Select a Paper (due Friday 5/29, 11:59 pm PDT)

The paper must be selected from the proceedings of the 2020 IEEE Haptics Symposium. (While journal papers are more complete and rigorously reviewed, we will use conference papers since their scope and depth are more appropriate for a short presentation.) You can browse the proceedings and download pdf files using IEEE Xplore: https://doi.org/10.1109/HAPTICS45997.2020. Please do not select a paper from Allison's research group (i.e., where Allison is an author). Discuss with the instructors if you need help selecting a paper.

Note: Access to the IEEE Xplore paper database may require that you sign in with your Stanford credentials. Please see http://library.stanford.edu/using/connecting-campus if you have trouble connecting from off campus.

As soon as you have selected a paper, add it to the google sheet: https://tinyurl.com/ME327-Spring2020-Teams. You cannot select a paper that another team has selected already; check to see what is already there and do not change any other team's data! There are 40 papers total, so plenty to go around. Provide the complete reference (see example at the top of the Google sheet), and link the cell to the DOI URL for that paper (provided on IEEE Xplore).

Prepare a Simple Hands-on Demo (due at your assigned Interactive Session, 6/2 or 6/4)

In the first few weeks of class, Allison gave a number of simple hands-on demos during the interactive sessions, order to highlight aspects of human haptic perception, the challenges of creating haptic displays, etc. Ideally using ideas from the paper you selected, or alternatively from another source if you are not inspired by the paper, prepare a very short (2-minute max) live demonstration to present during an interactive session.

Only one team member should have to give the demonstration – this person needs to be available during at least one of the interactive sessions on June 2 and 4, and be connected to the zoom session via camera, microphone, and speaker. During the demonstration, clearly explain the idea you want to communicate, say what materials are required, and demonstrate with your own hands (and other materials if needed). Please be

sure that your face, hands, and whatever else you will show are well lit – avoid backlighting. If your hands or other objects that are part of your demonstration, make sure they are in the field of view of your camera. Avoid slides or screen sharing because this can take too much transition time.

Once you know what you would like to present, add it to the google sheet: https://tinyurl.com/ME327-Spring2020-Teams. Try to avoid selecting the same topic as another team who has already listed their topic. The interactive session to which you have been assigned will be announced on Friday, 5/29. As with all interactive sessions, everyone in the class should attend if possible, and watch the recording later if not.

Prepare and Record Your Presentation (due Tuesday 6/2, 11:59 pm PDT)

Read the paper to understand the purpose, results, contributions/significance, and		
drawbacks/limitations of the work. Feel free to use other resources as needed. (You might be able to		
use the authors' website and other papers to find additional information and useful figures.) Your talk		
can expand on the paper as needed to explain the concepts or potential future work. However, the bulk		
of your presentation should be focused on information given in the paper.		
Create an 8- to 10-minute presentation, with slides and accompanying voice over. Record this as a video		
using Zoom or any other software you prefer. The final video must be accessible by a URL (Zoom		
recording link, YouTube link, etc.).		
Every person in the team must speak in the video, with approximately equal time dedicated to each team		
member. You can choose whether or not to show the video of the speaker's face or not in the		
recording.		
Use any format for the slides that you like (PowerPoint, Keynote, Google slides, pdf, etc.). Prepare		
slides that clearly communicate the content of the paper to the viewer.		
You should aim for professionalism and reasonable "production values" in your presentation. However,		
don't overdo it! "Perfect is the enemy of good" is an appropriate adage for video lectures, and we don't		
expect you to do any video post-processing/editing. If you stumble, no problem - just keep going as if it		
was a live presentation. The teaching staff won't be able listen to practice talks, but if you have any		
questions about your slides, pronunciation, technical content, etc., don't hesitate to ask.		
The presentation grade is based on the knowledge and clarity/communication of the material in the		
paper.		

Create Quiz Questions for Your Paper (due Tuesday 6/2, 11:59 pm PDT)

You will create 2 or 3 quiz questions for your paper/presentation, similar to the simple quiz questions Allison includes in her pre-recorded lectures. Write 2 questions if you have a 2-person team, 3 questions if you have a 3-person team. The questions should not be answerable unless the viewer has watched your presentation and/or read the paper. We will create a google form for the quiz for you team, and send you the link to edit it on Friday 5/29.

View Presentations and Take Quizzes (due Monday 6/8, 11:59 pm PDT)

After teams have submitted their video URLs and added quiz questions to their Google form, we will randomly assign each student in the class to view 4 videos and answer the corresponding quiz questions. This is in lieu of pre-recorded lectures from Allison for the week of June 1-5.

Grading

Hands-on demo	3 pts.	(group grade)
Presentation: Knowledge	3 pts.	(group grade)
Presentation: Clarity	3 pts.	(group grade)
Viewing/quizzes	3 pts.	(individual grade)
TOTAL	12 pts.	