05-Jan-16 EEL 4665/5666: Intelligent Machines Design Laboratory

Guidelines for Oral Presentations

Oral reports serve an important function in engineering practice. Engineers must frequently report to management about progress on an active project or propose new ones. Engineers with excellent oral presentation skills have a decided advantage in advancing their careers.

STRUCTURE of the TALK

The structure of a typical oral presentation follows.

- 1. TITLE PAGE
- 2. SUMMARY OF TALK
- 3. INTRODUCTION
- 4. BODY OF TALK
- 5. CONCLUSIONS
- 6. FUTURE WORK

TITLE PAGE

Announces the title of your project, your affiliation, your primary associates involved in the project, and the date of the talk.

SUMMARY OF TALK

Outlines in broad, easily understood terms 1) the scope of the problem being addressed, 2) what you hope to gain by solving the problem, 3) your approach to a solution, 4) what you have done, 3) results obtained to date, and 5) future plans.

INTRODUCTION

Provides background material and related prior work addressing the problem. Details scope of the problem.

BODY OF TALK

The amount of information and time allotted to present the information dictates the number of overheads, slides, etc. Because of these limitations, the speaker should give careful thought in the selection and construction of the material presented. Time usually does not permit you to say all the things you would like to say about your work.

CONCLUSIONS

States accomplishments and results. Conclusions should also indicate the scope or limits of your results.

FUTURE WORK

Indicates what must be done to complete, enhance, or extend your work. Your should also suggest an approach that will likely lead to successful results.

VISUAL AIDS

PowerPoint (or equivalent) is required.

Overheads and slides should use large fonts (24 pt) and not be crowded with too much information. The

horizontal aspect of the media should be larger than the vertical aspect for a more pleasing appearance. Only the salient points should appear on the visual aids. The speaker fills in details orally. Talks populated with figures, diagrams, photographs, graphs and tables project information more efficiently and interestingly than just words. Create figures, diagrams, graphs and tables that contain enough information so that an intelligent viewer can understand them even when viewed singly and out of context. Avoid detailed, complex figures which create sensory overload in the viewer.

Exhibition of artifacts enliven a short presentation. For longer presentations the speaker may offer video, music, recorded voice, demonstrations, humor and other aids. Too much of any one modality of presentation either bores, irritates, or fatigues the audience. Strive to maintain balance.

PRACTICE PRESENTING

Even accomplished speakers work on their presentation skills. Listeners appreciate a smooth presentation without excessive *ahs* and *uhs* to filter. Avoid distracting body language like picking your nose, covering your mouth with your hands, frequent shifting from one foot to another, tapping your fingers or a pen on the podium, tapping your feet, fumbling with loose change in your pockets, nervous coughs, etc. Speak up and project your voice. Develop eye contact with more than one pleasant face in the audience, but avoid eye contact with negative people. Move away from the projector and screen to permit audience viewing from all angles. Staying in one place too much often blocks someone's vision. Too much moving can be distracting, so gauge yourself. For example, moving to place an overhead on the projector and backing off towards the screen or moving to the other side of the screen once or twice during a single overhead presentation does not annoy.

Do not attempt to present detailed derivations of equations or long sequences of logical arguments to develop a point. Leave that to written reports. Instead, argue plausibility of the equation or logical conclusion so that audience can intuitively determine that your more careful written work has validity. With plausibility established, interpret the meaning of the equations or consequences of your arguments.

Finally, practice your talk in front of friends and have them criticize your presentation in terms of the parameters discussed here.

QUESTIONS AND ANSWERS

Listen carefully to the question and rephrase it, if necessary, to ascertain if your understanding of the question matches the intent of the questioner. Be prepared to answer questions about your project without being defensive or attacking. Be honest and polite! Deflect hostile questions with an informed, factual, dispassionate response. Questioners often ask, "Did you thing of doing X?", as a way to show off their understanding of your work. While possible frustrating to the presenter, such questions often lead the presenter to novel ideas. A typical response might be one of the following

- "I considered X, but Y appeared more promising. I did (did not) verify this."
- "I did not consider X. From your description X might be a promising approach."
- "As I understand your description, X has the following deficiencies with respect to my project objectives and does not appear suitable."

Stay in control of the process. Do not let an argumentative person capture the stage or spotlight from your presentation.