

International Conference on VLSI Design 2006

Speakers' Guide*

Speaking at the *VLSI Design 2006 Conference* is an important career event. The Program Committee selected you as an expert to present an important message to VLSI professionals. This guide shows you how to organize your talk, prepare your slides, and give your presentation with maximum effect. You have 20 minutes for a long paper (16 minutes for presentation and 4 minutes for questions) and 15 minutes for a short paper (12 minutes for presentation and 3 minutes for questions). Allow 1 to 1.5 minutes per slide for your presentation, depending on the slide complexity. VLSI Design will review your slides and suggest improvements. **You will receive an email from one of your Session Chairmen, and you should email your slides to your Session Chairman by Dec. 10, 2005 in Powerpoint format. He will review your slides, email you corrections, and expect you to email the improved slides to him so he can check them again. Your slides should be corrected and emailed again to your Session Chairman by Dec. 24, 2005. We are quite sure that this will greatly improve the quality of your presentation and consequently that of the entire conference. Once the final slides are accepted, you will not be able to change them without the permission of one of the Program Chairmen.**

1. Printed vs. Spoken Media

At *VLSI Design*, you use your paper in the proceedings and your presentation at the conference to put across your original idea(s). Recognize that these media are distinctly different, and what works for a written paper usually fails in a spoken presentation. The verbal presentation is a discussion, rather than a reading, of your paper. Just reading your paper is boring, which causes the audience to leave and look for a more interesting talk. Your presentation is an "advertisement" for your paper and a chance to market it to the audience. A successful presentation will cause people to read your paper. A bad presentation will cause your paper to be ignored.

Prepare a script for your presentation, and design it for listeners who are watching, and not for readers. Readers of the proceedings set their own pace, whereas you control the pace at which the audience must absorb your ideas. So, printed papers and technical verbal presentations require very different methods, language, and illustrations to argue and prove your point.

Long sentences in written papers, when spoken, are hard to follow. The listener cannot reflect on an idea without falling behind the speaker. The listener also cannot anticipate what you will say next, to put your idea in context. Therefore, you must first put the idea in context for your listener. Avoid unfamiliar terms – define every term before using it in your presentation, as the audience cannot look it up. Simplify all complicated formulae before presenting them.

*This material is a condensed version of the *International Test Conference Speakers' Guide*, which has been shown to be an outstanding tutorial on how to give a talk.

Common Mistakes:

- a. The speaker merely “recites” his paper. Result: Bored audience, which prefers to read the paper rather than hear it recited.
- b. The speaker does not motivate why his research was done. Result: Bored audience, because they do not see any point in doing this work.
- c. The speaker uses unfamiliar terms or jargon without first defining them. Result: Total non-comprehension of your talk by the audience.
- d. The speaker puts up unreadable slides. Result: Bored audience, because they cannot read the projected slides. Print out your slides, and put each slide on the floor. Standing above the slide, try to read it. Anything on your slide that you cannot read at that distance should either be removed, or magnified until it is readable. If they cannot read it when projected, there is no point in putting the material on the screen. **NEVER PUT COMPLEX PROGRAM CODE OR EXTREMELY COMPLICATED FORMULAE IN A PRESENTATION.** Instead, summarize what the code does, or what the formula means, in your presentation. They can get the complete details from your paper in the proceedings.
- e. The speaker writes long, loving sentences in English on his slides. Result: The audience stops listening to the speaker, since they can read the sentences on the slides faster than the speaker can say them. Instead, think of the slides as fragments that merely outline your talk, but do not have the details. You will verbally add the details to the slides. This keeps the audience focused on YOU, and what YOU are saying. Also, the slides provide diagrams, pie charts, and bar charts to illustrate trends. **Avoid tables in your slides – always convert tables into bar or pie charts, since tables are notoriously hard for audiences to digest.**

2. Talk Organization

- a. Put Across a Few Key Points. The audience wants to know how your ideas affect their work, or how they can benefit from your ideas. You only have time to get across a few key points to the audience, so focus on what is more significant in your paper, and skip the minor points. Compare your work with existing, known work.
- b. Simple Outline – Use this for your Talk
 - Introduce the problem. Why did you do this work? Explain your goals.
 - Describe your solution, and how it was achieved.
 - Explain why your solution is good. Explain its disadvantages or limitations.
 - Suggest additional applications.
 - Explain whether future work should be done along these lines or not.
 - Conclude and summarize the significance of this work.

Tell your story in a simple straight line – make each point lead to the next. Don't skip around, or the audience may lose the train of your thought. A simple story line, building from problems to results and solutions, and cause to effect, is most effective in exciting the audience about your talk. Avoid unnecessary detail.

3. Mandatory Slides

- Title Slide
- Purpose Slide

- Outline Slide
 - Conclusion Slide
4. Slide Planning
- **Correct Amount of Detail.** The most common error in slides is too much detail and information on one slide. Limit each slide to 6 to 8 bulleted items. Avoid complete English sentences – delete articles, and convert prepositional phrases into single adjectives. Use active, not passive, tense. Here is what not to do:
 - **A complete fault coverage of 100% was achieved by the automatic test-pattern generator using the method of spectral analysis.**
This is a bad item to put on your slide. Replace it with:
 - **Spectral Automatic Test-Pattern Generator got 100% Fault Coverage**
This is shorter, and says the same thing. In your speech, you can add many more words to what is on the slide. Punctuation on the slide bullets is unnecessary – the slide contains sentence fragments in simplistic English, not complete, complex sentences. If a slide gets too complex, delete some of the information, or break it into 2 slides. Usually slides get too complex when the speaker insists on presenting too much low-level detail from the paper in the talk. The talk is a summary of the paper, not a verbatim presentation of the paper.
5. Number of Slides: 12 to 16 for a long paper, and 10 to 12 for a short paper.
6. What to Illustrate. A frequent error made by presenters is that they assume that what is clear to them, after working for many months on their paper, is clear to the audience, who has never seen the material before. You must try to make your concept clear to the audience in a few minutes. Wherever possible, illustrate relationships visually, using graphs and figures, rather than with tables. The more visual a presentation is, the better it is.
- a. Key Items – the Outline slide should be your second slide, right after the title slide.
 - b. Trends – Use line graphs to show these.
 - c. Comparisons and Proportions – Use bar charts for comparisons and pie charts to show proportions.
 - d. Symbols – Symbolic diagrams and flow charts are useful if they are kept simple.
 - e. Structure and Relationship – Use schematic diagrams, but show only what is necessary to make the audience understand the material.
 - f. Tables – Detailed tables are very bad. The audience cannot easily see trends in data in detailed tables. If you must use a table, use only 4 columns, and only 4 rows. Usually, table information can be better presented as a bar or pie chart.
 - g. Digressions – Digressions can be good, because they add interest to your talk, and focus the audience's attention on you. When you digress, use a blank slide. You should never display a slide saying one thing, while you are talking about something totally different.
 - h. Duplicate Slides – When you must use an illustration several places in the talk, duplicate it for the audience.

7. Making your Slides in Powerpoint. Please look at the attached sample Powerpoint presentation as an example of how to create your slides. Here are some commonly followed rules:
- a. Do not write long, loving sentences in English on your slide. Write simplistic sentence fragments, without articles, to shorten the detail.
 - b. Single point lines in figures in Powerpoint presentations look fine on your PC, but when they are projected, they tend to wash out on a large screen, and cannot be seen. Use 3 point lines in all of your figures.
 - c. Text should be 18 points in order to be clearly visible on the screen.
 - d. Use Arial or some other sans-serif font. Do NOT use Times-Roman or a serif font, because the extra ornamentation of the letters make them harder to see in a large room.
 - e. Use pastel color for text and figures on a deeply-saturated color background. Color schemes that work are yellow or white text and figures on a dark blue background. Azure blue text is visible on a dark blue background. DO NOT use a white background for slides – use dark blue or dark green. Never use black text on a dark saturated color background – it is unreadable.
 - f. Some of the Powerpoint slide templates have overly ornamented backgrounds, which detract from your figures and text. Do not use these – you want the audience to focus on what you have to say, and not on what some slide designer did at Microsoft.
 - g. When you first introduce a term or some jargon, italicize it and explain (in the slide) what it means.
 - h. Mathematical expressions should be used sparingly. In your equation editor, all variables should be italicized, but parentheses, brackets, and numbers should NEVER be italicized. Also, it is nice to put mathematical variables in italics when they appear in your regular slide bullets.
 - i. Many presenters scan figures and put them into their presentations, with the result that the figure is often blurred or too small to be easily read. In such cases, rescan the figure at higher resolution, or redraw it in Powerpoint to improve its quality.
 - j. It is better to present fewer slides well, than to present many badly.
 - k. Your company or organization logo should appear only on the 1st slide.**
 - l. Avoid repeating the same information over and over in your slides – that wastes valuable space in your presentation.
 - m. Do not put citation numbers or detailed bibliography entries in your slides. First of all, the audience cannot look up what [13] refers to, so the citation is useless to them. Secondly, if you want to refer to prior work, it is sufficient to give the name and initials of the first author, and then just say “and others.” Give the title of the paper, and the abbreviation for the conference or journal where the information appeared. They can find the complete citation in your paper in the proceedings.
8. Rehearsing. Rehearsing is the most important part of your preparation for your talk. Generally, the quality of a talk improves dramatically after 3 or 4 rehearsals. This is because you have finally organized, in your mind, how you will present this material. Sometimes, it is helpful to write out presenter’s notes on what you will say verbally as you present each slide to the audience. You can keep a hard copy of these notes

with you during your presentation. You should rehearse your talk with someone else, and listen to their suggestions and implement improvements. Vary your speaking level and intonation – this is much more interesting to the audience than delivering the talk in a monotone. Avoid talking too rapidly – you will lose part of your audience if you do. Do not just read your slides – add additional material (details) to your slides as you go through them. Otherwise, you will bore the audience. Time your presentation and keep within the allotted time. If you go over, the Session Chairman will stop you and move on to the next talk. The worst talk that you can give is one that gives unnecessary detail about your idea, so that there is no time to present the results showing whether the idea worked or not. Try to anticipate what questions the audience will have, and incorporate their answers into your talk.

9. On the Day of Your Talk in Your Session. VLSI Design will provide a projection system with a remote control unit and will see that your slides are on the computer system in the meeting room. You will also have a laser pointer at your disposal. A reading light will be provided at the podium for you to look at your annotated hard copy of your slides. Floor microphones will be provided for the audience to ask questions after your talk. You will be equipped with a cordless microphone. Make sure that this microphone is turned ON when you need it, and turned OFF when you don't wish to be heard. Attendance will be roughly 1000 for plenary sessions and several hundred for each technical session.

On the day of your sessions, a Speaker's Breakfast will be provided at 7:30 a.m. (the room will be posted at the conference registration desk), where you should dine with your Session Chair and provide him with a 3 line biography of yourself. You will also meet the other authors in your session. This will be your last opportunity to adjust your slides, which will be loaded into the conference projection system at that time.

During your session, the Chairman will introduce you and give a very brief biography of you. He will time your talk, and ask you to finish up when you are in danger of running over time. After your talk, the Chairman will open the floor for discussion, and moderate the questions about your talk. When an audience member asks you a question, repeat the question, and then **DIRECTLY ANSWER THE QUESTION**. A frequent error is that a presenter answers a different question from the one that was asked. This leaves the questioner unsatisfied. **IF YOU DON'T KNOW THE ANSWER TO THE QUESTION, IT IS BEST TO SAY SO.**

Giving your Talk. **DON'T READ YOUR PAPER!** Converse with the audience as you might talk in a conversation. Be alert, enthusiastic, and confident, and the audience will sense that and respond enthusiastically. Make sure that you get a good night's sleep before your presentation. Do not over-rehearse your talk – if you are becoming bored with it, you have done enough rehearsing.

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