Preparing and Delivering Presentations

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Cmput 603

... including material from J Nelson Amaral, M desJardins and others...
Outline

- Oral Presentations
  - Preparing slides
  - Delivering presentations

- Posters
  - Preparing material
  - Presenting posters
General Comments about presentations in general:

People are uni-processors: if they're reading, they're NOT listening. Therefore, it makes sense to write as LITTLE material on your slides as possible. Avoid complete sentences; use Bullets! Use LARGE fonts. Use pictures!

Give a simple examples FIRST, before giving the formal definitions, theorems, etc. Then perhaps use that example to "instantiate" the definitions, etc. (Don't worry: people typically do an amazingly great job of generalizing from such examples.) Help parse by splitting out phrases on separate lines.

Try to avoid technical terms, if at all possible. (Or at least give a simple example of the idea.)

Be sure to re-read the slides and check!

Typos

Why have this junk?? What does it mean?

No bullets... Bad line breaks

Hard to read color? Too small?

... lighting? ... movement? ... monotone voice?
Presentations

- People are uni-processors:
  - If reading, NOT listening $\Rightarrow$ minimize text!
  - *Avoid complete sentences*; use Bullets!
- **Simple examples** FIRST
  - ... before formal definitions, theorems, ...
  - use example to "instantiate" the definitions
- Easy to read **fast**:
  - Avoid technical terms
  - Lots of Pictures!
  - Separate lines for each idea
  - Use **LARGE** fonts... colors are fun ... so is animation
- Proof-read!!
Preparing Slides

Abuse of animation is a cardinal sin!

- Use the minimum amount of text necessary
  - Also have MINIMAL “stuff” in slide layout!
- Use examples
- Use a readable, simple, yet elegant format
- Use color to emphasize important points, but avoid the excessive use of color

M desJardins
How Much to Say?

- Think of **intended audience**
  - What do you want those people to know, when done?
  - Say THAT!
  - Say ONLY THAT!
    - Everything you say should relate to this msg(s)!
  
  - You tried a complicated, hard-to-explain alg ... that didn’t work.
    - Why waste the audience time with 5 pages of details?

- Superset of a good talk is *NOT* a better talk
  - Good movie == 3 good scenes; No bad ones!
Preparing Presentations: Timing

- Know how long you have
  - How long is the talk? Are questions included?
  - A good heuristic is 2-3 minutes per slide
    - Maybe... depends on your own pacing...
  - Can *never* say *everything* about a topic, so don’t worry about skipping some things!
- If inexperienced, practice your timing:
  - A couple of times on your own to get the general flow
  - At least one dry run to work out the kinks
  - A run-through on your own the night before the talk
Preparing Presentations: Audience

Know your audience!
- If a “general audience”:
  Give the necessary background
- If talking to researchers in your field:
  Don’t waste time on basics

Imagine you didn’t know this material
- What would YOU need to get it?

Explain each new concept clearly
- Use example! ... pictures!

Emphasize
- what you’ve done
- why they should care!
Preparing Presentations: Content

- Know what you want to say
  - Do NOT just giving a project summary
    - ...not interesting to most people
  - Give enough detail to express your interesting ideas
    - and to show that you’ve actually solved the problem
    - but not so much that you lose your audience
  - They want to hear
    - *what you did that was cool* and
    - *why they should care*
  - They should hear these points
    - at the beginning of the talk
    - over the course of the talk, and
    - at the end of the talk
  - If intrigued, they’ll ask questions or read your paper
Preparing Presentations: Help Viewer

- Pictures better than words
- Use line breaks to help parse
- Use colors consistently
  - Eg, write everything that the user types, in blue.
- A full slide of text can be overwhelming!
  - Use animation to present information incrementally.

Notation:
- Do not use the same variable for many purposes... not even if in different fonts!
- Avoid "1" vs "|" "0" vs "O"
Preparing Presentations: Story

- Tell a story!!
  - Goal is for THEM to understand!
  - Don’t give deep, complicated proofs

- Re-read slides
  - make sure they are understandable
  - make sure they “flow”

- Be cute... but not too cute...
  - Never have off-color comments

- Be sure **YOU understand the material!**
  - ... even if someone else’s slides!
  - Heuristic:
    - Think through to one level more depth than slides...
Preparing Presentations: Overhead

- Roadmap slides
  - if >15 minutes
  - helps “wake people up”

- Organization
  - Tell’em what you’re going to tell’em
    - ≈1-2 minutes
  - Tell’em
  - Tell’em what you told’em
    - ≈1 slide (1 minute)

- Manage time
  - Have “accordion slides”
  - If necessary, skip material
    - Plan for this...

- People best remember the *LAST* thing you say
  - ... Contributions, Future Work
  - ... Future Work, Contributions
Preparing Presentations: Details

- Define terms
  - Before use!
  - Use in example
- Label axes of graphs
  - But don’t include “Fig 1” or “Table 2”
- Don’t give complicated proofs
  - Perhaps just sketch high-points
Preparing Presentations: Extra Slides

- If you
  - anticipate some questions
  - have tangentially related ideas

have AUXILIARY slides, at end of presentation!

- Use to answer questions
- Use for later talk, when have MORE time
Preparing Presentations: Size

- YOU control the space in your slides...
  - Use it effectively!

- Make figures **LARGE**!
Yadda Yadda Yadda

- Blahs (332)
- $P: 0.8836 \pm 0.0928$
Yadda Yadda Yadda

Blahs (332)
P: 0.8836 ± 0.0928
Preparing Presentations: Font

- $\Rightarrow$ vs $\Rightarrow$
- $a = <2,3>$ vs $a = \langle2,3\rangle$
- * vs $\times$
- $\in$ vs $\in$
- $!=$ vs $\neq$
- $\mathbb{R}$ vs $\mathbb{R}$
- $\{ \ldots \}$ for set; $[\ldots]$ for tuple; ...
- Use spacing to help viewer

\[
A = f(b(x), g(y)) \text{ forall } x, y
\]

\[
A = f( b(x), g(y) ) \text{ forall } x, y
\]
Practice, Practice, Practice

- **Practice!**
  - Give talk to
    - professional colleagues (students, advisor, collaborators)
    - friends, or spouse, or ...
  - Slide numbers (at least during practice)
- Never give a talk for the first time 😊
Just Before Presentation

- You are in charge!
  - Engineer your room
    - lighting
    - decide where to stand
    - move obstacles away
  - ...
- Arrive early!

- Details...
  - Plug in laptop
  - Turn off cell phone, messaging, ...
  - ...

20
Other Advice: during presentation

Don’t forget:
- You are the EXPERT on this topic ...
- You know it better than the audience!
Relax and enjoy!

Interact with the audience!
- Make eye contact
- See if audience is tracking
- Ask questions!
- Don’t just read your slides!

Move!
- Don’t fidget
- You can (should!) move around
- Point to PRESENTATION, not to your laptop!
- Do not just sit ...

Adjust voice for emphasis ...
If you make a mistake ...

- Don’t fret, pout, get upset ...
- If not critical, just on
  - Perhaps mention this issue at END
  - Or not...
- If critical...
  - just go back to problem and fix it!
  - fix it when necessary
Series of Presentations

- When giving a SEQUENCE of related presentations
  - Eg, a course, or seminar series, or ...
- Have “landmark slides” covering ENTIRE series
- Take time at start of each lecture to
  - Set the context (wrt global “landmark slides”)
  - REVIEW previous material
- At end of each lecture:
  - summarize current situation
  - point to future material
Use ideas from David Cook’s Presentation!

- His focus: “teaching students”, but same ideas apply to
  - general audiences... fellow researchers
- Lecture is for the AUDIENCE
  - Not for you!
- Show that YOU find it exciting
  - Explain why it is useful
  - Make it accessible
- Try to BOND with the Audience
  - start with Story, ...
- Reward the questioner
  - ... even if the question is ...sub-optimal ...
Some Useful Resources

- **Writing:**
  - Lynn DuPre, *Bugs in Writing*
  - Strunk & White, *Elements of Style*

- **Giving talks:**
  - Mark Hill, “Oral presentation advice”
  - Patrick Winston, “Some lecturing heuristics”
  - Simon L. Peyton Jones, et al., “How to give a good research talk”
  - Dave Patterson, “How to have a bad career in research/academia”

- Fun: Gettysburg Powerpoint Presentation: http://norvig.com/Gettysburg/
Outline

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- Posters
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  - Presenting posters
Poster: Form

- Poster ≈ Presentation (ppt), ... not essay
  ... easy on the eyes...
  with
  - pictures
  - few words (lots of white space)
  - large letters

- Stand 2-3 meters from poster.
  - Should get most of the ideas
  - ... based only on the figures, w/out the "small print"
Think of Poster ≈ Presentation...

- Use line breaks to help readers parse sentences
- Avoid "Figure 1" or "Table 3"
  - unless you *need* to refer to a figure/table
  - Typically NOT needed – just use proximity, or arrows
- Use just PHRASES within BULLETs
  - not complete sentences
- Extra words are problematic, as ...
  - If people are reading, they aren't listening!
  - Many words make a poster look crowded, ...
  - like it will be hard to understand.
  - ⇒ potential viewers will go to another poster ...
Which would you rather see?
Effective Poster: Contents

- **Re-read it**, to make sure it is understandable
- Include
  - BIG idea? ... simple to understand, quickly!
  - Use examples – in pictures!
    - Better: **one** example,
      - many times to illustrate the basic ideas
- Framework
  - **Foundations** – what problem are you trying to solve?
    - Why should anyone care, if you succeed?
  - **Your approach** (high level)
  - **Your results** – theoretical, empirical, whatever...
Use Diagrams!

- Many Computing Science ideas correspond to some *procedure*
  - Perhaps with subroutines...

Distinguish Data from Process
- Be sure to include “implicit inputs”
  - Eg database
Left-to-right: reader will slide left-to-right, then jump back to the left margin, then slide to the right, then ...

Especially problematic if many viewers
- "sliding viewers" will distract others!
Effective Poster: Presentation

- **RIGHT-handed** ⇒ poster on your **RIGHT** side
  - so you can point to material, while facing audience
- As you progress over the poster, you will block some viewers
  - unavoidable... just try to minimize it.
- Devote your attention to current viewer(s)
  - If others arrive during presentation, interrupt to say
    "I will restart in \( X \) minutes"
Don’t forget ...

- Acknowledge your funders!
- How to learn more...
  - get databases? ... code?
  - URL? ... email address?
  - Bring/distribute business cards (with URL)!
- If general poster
  - NOT in a single specific venue
  - give citations to where these results appeared
Summary

- Use ideas for Good Papers...
- Preparation
  - Think of what you want audience to know
    - Include (only) that!
  - Large print, easy to follow...
  - Be concise, focused
- Delivery
  - Engineer your environment to facilitate communication
  - Relax, and Enjoy!