Giving Good Presentations

Christopher Kruegel

Based on material by
- Tania Barham (UC Boulder)
- Katherine Compton (UW Madison)
- Mark Chang (Olin College)
What Is A Good Presentation?

- You want the audience to remember what you say, not how you say it
- A good presentation should make the audience think and not confuse them
- A good presentation has content
- A good presentation has a structure
- A good presentation should be entertaining
Why A Good Presentation?

- You want people to
  - Understand your work
  - Be interested in your work
  - Think you are great

- What happens if you give a bad one?
  - Few pay attention
  - They may fall asleep
  - Might think your work is not important
Tips For Presenting

- Part I: Structure and presence
  - Content
  - Attitude
  - Voice and mannerisms

- Part II: Slide design
  - Understandable
  - Interesting
Consider Your Audience

- Make presentation relevant to audience
  - i.e., don’t present all math / details

- Think about following questions
  - Who am I addressing?
  - What do I have to say?
  - What do I want my audience to know?
  - What would my audience want to know?
Tell A Story

- Create a structure that is similar to a good story
  - Beginning: context of presentation
  - Body: develop main points
  - Conclusion: summarize main points, take home message
- Don’t drown the audience in details
  - Frequent mistake is to talk about the how rather than the why
Getting Started

- Don’t start with an overview slide
- Start with a question or motivating example
- Give the “zeroth” order idea in one sentence
- Show the magic
  - Conclusion goes first
  - Make the audience wonder how you will get there
People are excited even before you start because you have a great title/abstract.

You have shown the “magic” with a question or motivating example.

Teaser results, people are wondering how you got there.

Nitty gritty of the math / algorithm / implementation. You are losing some people but it’s ok.

Cool results.

“What’s in it for me”? You give audience something they can use with “Future Directions”.

But there is more. Wait and see how next year I will show you more cool stuff. Go see my website.
Curve Of Boredom

Audience Interest

Real Curve

No clue what the title/abstract, jargon words mean

Start with meaningless “Overview” slide

People are excited anyway

We don’t know the context of the theory

Describe theory

Your Intended Curve

Discuss future directions

Share results which you were trying to keep secret till the end

Describe second order details

Related work

Too late to share those cool results

Audience is lost because they don’t know ‘why’
Engage Your Audience

- Keep audience interested
- Keep them with you

- Things that can affect this
  - Topic, topic depth
  - Attitude and presence
  - Mannerisms
Communicate With Audience

- Look at the audience
  - Try to look at everyone, not just one corner of the room
  - If you are nervous pick some spots at the back of the room above people’s heads.

- Be enthusiastic
  - Vary the tone of your voice
  - Use humor if it suits you, but don’t force it or overdo it. Content is what matters.
Attitude (Yours)

- Are you interested in your topic?
  - If no, get a different one
  - If yes, **act** like it

- If you aren’t excited…
  - Can’t expect *other* people to be!

- Don’t talk down to audience
  - You know more than them about this
  - They know more than you about other stuff
Know Your Topic

- Be prepared to get questions!
- What if I don’t know the answer?
  - Know when to say “I don’t know”
  - Know how to say “I don’t know”
  - Don’t just stand there uncomfortably!
- Be able to recover from interruptions
- Know what to skip if you are running late
  - Don’t just talk faster!
Know Your Location

- Need to bring a laptop?
- Need to bring a CD, or email a PPT in advance?
- Need to print transparencies? How far is audience from screen?
- Can you point with your hand, or do you need a laser pointer?
How To Speak

- Speak slowly and clearly.
- Take a breath before you move to next slide.
- Take a deep breath (unobtrusively) before you start.
- Try not to say so, ummm or other time fillers too much.
  - We all do it, it takes practice.
- Try standing squarely on both feet and keep hands someone still.
Dead Man Talking

- Are you hiding behind the podium?
- Are your hands/face motionless?
- Are you staring…
  - at your advisor/boss?
  - at your laptop?
  - at the screen?
  - at the ceiling?
- Is your back to the audience?

- If so … you’re probably boring!
What Not To Do

- Stand on one leg
- Hit yourself or a table
- Tap your pen
- Turn your back on the audience
- Wave your hands like you are talking Italian
- Put your thumbs in your pockets
- Cross your arms
Practice, Practice, Practice

- Practice on your own (get timing right)
- Practice giving it to each other
- Maybe write out the full text you want to say
  - Forces you to think of every aspect
  - Helps you commit parts of you presentation to memory
  - Make notes of key points and use those during presentation. But don’t read a script, or always look at the screen.
Part II: Slide Design

- Goals
  - Convey the necessary information
  - Be readable/understandable
  - Be interesting (enough)

- Avoid
  - Overstimulation
  - Boring ;-(
Design Of Slides

- You do not need to use full or wordy sentences because they can become very, very long and make it much hard for the audience to follow. They also make it much for difficult for you to quickly look at if you need a reminder of where you are at.

- Don’t use full or wordy sentences
  - Harder for the audience to follow
  - Harder for you to use as a reminder

- Starting with the verb can help
Design Of Slides

- Don’t use full or wordy sentences
  - Harder for the audience to follow
  - Harder for you to use as a reminder
- Don’t put too much text on one slide
  - Makes it hard to read.
  - Continue on topic on next slide, if too much for one
- Make sure font is big enough to read
  - 18 point font is probably the smallest to go
  - This depends on size of room.

Sub points in smaller font.
Do not attempt to put all the text, code, or explanation of what you are talking about directly onto the slide, especially if it consists of full, long sentences. Or paragraphs. There's no place for paragraphs on slides. If you have complete sentences, you can probably take something out.

If you do that, you will have too much stuff to read on the slide, which isn't always a good thing.

Like the previous slide, people do not really read all the stuff on the slides.
- That's why it's called a “presentation” and not “a reading” of your work

Practice makes perfect, which is what gets you away from having to have all of you “notes” in textual form on the screen in front of you.

Utilize the Notes function of PowerPoint, have them printed out for your reference.
- The audience doesn’t need to hear the exact same thing that you are reading to them.
- The bullet points are simply talking points and should attempt to summarize the big ideas that you are trying to convey

If you’ve reached anything less than 18 point font, for God’s sake, please:
- Remove some of the text
- Split up the text and put it on separate slides
- Perhaps you are trying to do much in this one slide?

Reading a slide is annoying.

You should not simply be a text-to-speech converter.
Font Size

- You are close to your monitor
- Your audience is far from the screen

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If you find yourself saying “you probably can’t read/see this, but…”
- Then you probably have a **bad slide**!
- There are exceptions, but very few
This is a really long title for this single slide, I should have just summarized

- Hard to read
- Many people don’t read the title anyway
- Should have been “Long Slide Titles”
Know Slide Boundaries

- People can’t read text that runs off the side of the s
Bullets Are Not Everything

- How many
  - Levels of
    - Hierarchy do
      - You think
        - You need
          * To express
            - Your point?
Speelchick

- How smart will people think you are?

- Watch for
  - there/their/they’re
  - too/to/two
  - its/it’s
You Are Not Pixar Studios

- Animations ...
  - Animation
  - Can
  - Be Very
  - Distracting
  - Use it sparingly (it can be annoying)

- Use only where it is useful
- Know if presentation system will handle
  - Different versions of PowerPoint, Macs, etc.
- Or use multiple slides to safely animate
  - Flip-book style
Line ‘Em Up

- This is a bad drawing
- Put in some effort
The Art of Suspense
The Art of Suspense

- Don’t
The Art of Suspense

- Don’t
- Be
The Art of Suspense

- Don’t
- Be
- A
The Art of Suspense

- Don’t
- Be
- A
- Tease
Mommy, my eyes are burning!

- Can you look at this for 45 minutes?
- Colors look different on every LCD projector
- Colors look different between transparencies and projector

- Side note: if printing slides, may want to choose white background to save ink!
I See A Ghost

- More contrast on monitor than projector
- Different projectors == different results
- Colors to avoid with white are:
  - Light Green
  - Light Blue
  - Pale Yellow

- Your slides should have good contrast

Usually can’t read this…
Contrast Guidelines

- White background, black text is clearest
  - Can use other (dark) text colors...
  - But be careful -- don’t be distracting!
- Make sure to not use light-on-white or white-on-light
- Don’t using glaring colors
  - If not an art major, don’t have to get fancy
\[ X' = A \ast B \]
\[ = (A - (2^p - 1)) \ast (B - (2^q - 1)) \]
\[ = AB - B(2^p - 1) - A(2^q - 1) + (2^p - 1)(2^q - 1) \]

\[ X'' = (A - E_p)(B + E_q) \]
\[ = AB + AE_q - BE_p - E_pE_q \]
\[ = AB + AE_q - (BE_p + E_pE_q) \]
\[ = AB + AE_q - \frac{E_pE_q}{2} - \left( BE_p + \frac{E_pE_q}{2} \right) \]

\[ f(X', X'') = \frac{\Gamma}{2} \sum \frac{X'^{\delta \alpha \max(\phi^2)}}{X''^{\Gamma_{3/2}}} \sum \epsilon \sqrt{AB + AE_q - \frac{E_pE_q}{2} - \left( BE_p + \frac{E_pE_q}{2} \right)} \]

\[ \int_R \phi \rho f(\overrightarrow{X}|S_k) \frac{1}{(2\pi)^{d/2}\sigma^d} * \frac{1}{P_k} \sum_{i=1}^{P_k} \exp \left[ -\frac{(\overrightarrow{X} - \overrightarrow{W_{ki}})^T(\overrightarrow{X} - \overrightarrow{W_{ki}})}{2\sigma^2} \right] \]

- Ummm... okay...
Keep It Simple

- Do you really need all those equations?
  - This is very instance-dependent!
  - Depends on what you are discussing
  - Depends on your audience
- Sometimes you may need them
  - Explain the variables and what they mean
  - Give a “plain-text” description of it
- If you don’t need them, don’t use them!
Use Simple Examples

- This isn’t one. It doesn’t help
Design Of Slides

- Make sure tables, pictures, and graphs can be read
  - Titles on graphs and tables must be readable at back of room
  - Number must also be readable
### Results

- **You have lots of cool results**
  - No one can read this
  - No one can understand this

- **Graphs are your friend…**

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Graphs Can Also Be The Enemy
Pick A Line, Any Line
Bad Presentations

- Audience won’t see your work is great
- But will make fun of you from back row

Those are some NASTY colors...

Hey – it matches my tie.

Please let it be OVER...

What does that slide say?

Dunno, I’m playing minesweeper

zzz
Good Presentations

- Interesting topic, explained at audience’s level
- Slides are understandable and easy to see
- Good presentations reflect well on speaker!

I wonder if this technique would work for my problem

I never thought of that!

Let’s talk to them at the break

Interesting

I understood this one!

You should with a PhD...

But it’s outside my main area

I never thought of that!