How to make a presentation

For BMP 260C

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A few points

• Science is about research and advertising your research
• Personality?
• Language?
Outline

• Before the presentation
  - make slides (what & how)
• During the presentation
  - give the talk
• After the presentation
  - Q & A
Make the slides (what)
Make the slides (what)

• Figure out:
  - audience
  - message
  - motivation
  - time limit
Make the slides (what)

- Organization
  - outline
  - background
  - method
  - results
  - conclusions
Make the slides (what)

• Outline
  - background
  - method
  - results
  - conclusions
Make the slides (what)

- If use outline slide, make it USEFUL
- Do you need an outline?
Make the slides (how)
Make the slides (how) - simple

• KISS
• No long sentences
• Rule of six
• example
README.TXT

• 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.
Make the slides (how) - simple

\[ X' = A \ast B \]
\[ = (A - (2^p - 1)) \ast (B - (2^q - 1)) \]
\[ = AB - B(2^p - 1) - A(2^q - 1) + (2^p - 1)(2^q - 1) \]

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

\[ f(X', X'') = \frac{\Gamma}{2} \sum \frac{X' \delta \alpha \max(\phi^2)}{X'' \Gamma^{3/2}} \sum \epsilon \sqrt{AB + AE_q - \frac{E_p E_q}{2} - \left( BE_p + \frac{E_p E_q}{2} \right)} \]
\[ \int_R \phi \rho f(\vec{X} | S_k) \frac{1}{(2\pi)^{d/2} \sigma^d} \sum P_k \sum_{i=1}^{P_k} \exp \left[ -\frac{(\vec{X} - \vec{W}_{k_i})^T (\vec{X} - \vec{W}_{k_i})}{2\sigma^2} \right] \]

• Ummm... okay...
**Make the slides (how) - simple**

- You have lots of cool results

- Graphs are your friend...

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Make the slides (how) - graph

• Use graphs and tables

There’s a CPU, a RAM and an FPGA and they’re all connected
  - The FPGA connects to the CPU’s data cache
  - The bus is 32 bits wide
  - Blah blah blah blah
• You have to visualize it yourself
Make the slides (how) - simple
Make the slides (how) - font

- Font type
  - Serif & Sans Serif

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Make the slides (how) - font

- Font size

“You probably can’t see this from the back of the room…”

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Make the slides (how) - font

• Font size

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<tr>
<td>&lt;50</td>
<td>32</td>
<td>24</td>
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</table>
Make the slides (how) – letter case

- Letter case

UPPERCASE IS BETTER THAN LOWERCASE

Lowercase is better than uppercase
Make the slides (how) - bullets

• Bullets
• How many
  – Levels of
    • Hierarchy do
      – You think
        » You need
          * To express
            - Your point?
Make the slides (how) - color

• Color
  - text VS background
  - examples
Make the slides (how) - color

Dark letters against a light background work.
Make the slides (how) - color

Light letters against a dark background also work.
Many experts feel that a dark blue or black background works best for talks in a large room.
Make the slides (how) - color

Dark letters against a light background are best for smaller rooms and for teaching.
Make the slides (how)

Avoid red-green combinations because a large fraction of the human population is red-green colorblind.

Lots of people can’t read this -
and even if they could, it makes your eyes hurt.
Make the slides (how) - color

Other color combinations can be equally bad:

Other color combinations can be equally bad!
Make the slides (how) - color

• Color
  - no more than 4 colors
  - example
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!
Make the slides (how) – animation

• Fancy effects
  - building
  - transition
  - sounds
Give the talk
Give the talk

• Rehearse
  - not recite
  - bring notes?
  - timing; finish every sentence
  - Record, videotape. In front of friends
Give the talk

• Overcome stage fright
  - drinking? Pushups?
  - visualize the success
  - breath from diaphragm
  - Memorize the first 3 sentences
  - deal with nervous
Give the talk

• Body movement
  - stand still; weight on heel; chin up
  - hand movements: spontaneous

• Eye contact

• Voice; speed (clear)

• Some bad example
Give the talk – bad example

• Dead man talking
  - Are you hiding behind the podium?
  - Is your face motionless?
  - Are you staring...
    at your advisor/boss?
    at your laptop?
    at the screen?
    at the ceiling?
  - Is your back to the audience?
Give the talk – bad example

• Right here, see?
Give the talk – bad example

• Hmmm... the...ur... yeah

Practice makes perfect
  – Caveat: OVER practicing can be bad...

Most people lose 20 IQ points in front of an audience
Give the talk

• Laser pointer
  - helpful for graphs, tables
  - be careful
  - play with it
Give the talk

- Entertainment

*people will pay more to be entertained than educated*
Give the talk

• Manage your presentation
  - Be able to recover from interruptions
  - Know what to skip if you’re running late; not just talk faster
Q & A
Q & A

• Pay attention

• Know your topic
  - think ahead possible questions
  - from friends or lab mates

• Present longer on purpose?
Q & A

• What if I don’t understand the question?
  - catch key words
  - it’s ok to rephrase a question

• What if I don’t know the answer?
  - Don’t stand there uncomfortably
  - know HOW and WHEN to say “I don’t know”