

How to make a presentation

For BMP 260C

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Making a PowerPoint Presentation. Fannette Collins, Radiographics, 2004, 24: 1177-1183

Giving a PowerPoint Presentation: the art of communicating effectively. Fannette Collins, Radiographics, 2004, 24:1185-1192

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

$$\begin{aligned}
 X' &= A * B \\
 &= (A - (2^p - 1)) * (B - (2^q - 1)) \\
 &= AB - B(2^p - 1) - A(2^q - 1) + (2^p - 1)(2^q - 1)
 \end{aligned}$$

$$\begin{aligned}
 X'' &= (A - E_p)(B + E_q) \\
 &= AB + AE_q - BE_p - E_p E_q \\
 &= AB + AE_q - (BE_p + E_p E_q) \\
 &= AB + AE_q - \frac{E_p E_q}{2} - \left(BE_p + \frac{E_p E_q}{2} \right)
 \end{aligned}$$

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

- Ummm... okay...

Make the slides (how) - simple

- You have lots of cool results
- Graphs are your friend...

A	B	C	D	E
0.78799174	0.87677244	0.99348605	0.23781547	0.24437526
0.24910355	0.79708654	0.39825661	0.4894876	0.22079456
0.65729261	0.46901063	0.36471191	0.04697233	0.63468059
0.48205396	0.52657506	0.70503426	0.35280176	0.40935313
0.46328137	0.0774365	0.71517444	0.9394662	0.46843638
0.09762717	0.70884867	0.81407539	0.24571711	0.72497819
0.00773315	0.39906447	0.42344939	0.90776976	0.22209006
0.15857663	0.4181197	0.56488165	0.91405841	0.3578349
0.59242455	0.17894389	0.61926672	0.02978346	0.50789172
0.41285757	0.71470398	0.31906988	0.79658426	0.21587647
0.8855586	0.46534556	0.3701164	0.12452538	0.33415497
0.28231467	0.17509894	0.85801024	0.72984635	0.94731238
0.82370951	0.03235362	0.95622299	0.27726297	0.76619879
0.86245578	0.21094811	0.93272287	0.48265505	0.04960646
0.38953201	0.3665743	0.33754918	0.28178635	0.39637009
0.80522838	0.63509032	0.43333321	0.97677807	0.96198172
0.35928212	0.14878634	0.44201417	0.23251612	0.83375154
0.72099806	0.75212293	0.81061259	0.23756284	0.48518996
0.13329065	0.31602317	0.87489249	0.5304632	0.26191565
0.2588109	0.89039838	0.81380512	0.59139955	0.48488759
0.99314419	0.34635186	0.73292414	0.25933239	0.29230491
0.88041055	0.11473455	0.01934078	0.15717245	0.93780676
0.72332226	0.80195173	0.1792961	0.07832254	0.41154579
0.95925002	0.41696749	0.24905812	0.2111233	0.00256536
0.00580885	0.65322119	0.49666074	0.91641276	0.40573275
0.26004883	0.3010126	0.45604195	0.99935168	0.91271048
0.1508427	0.84418604	0.96241158	0.05548096	0.94093154
0.63750743	0.08979734	0.11100042	0.34646613	0.09994533
0.17176871	0.85518113	0.94522781	0.29368901	0.77444161
0.15186964	0.53105474	0.69991523	0.07876247	0.0023978
0.72306385	0.73755246	0.71402806	0.68090612	0.76015636
0.42140074	0.39036871	0.02247591	0.94725973	0.70692042

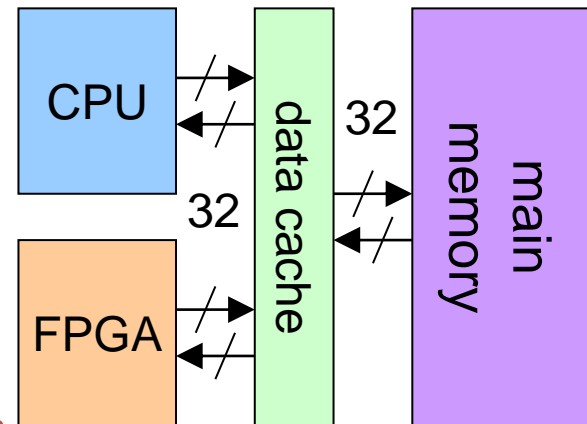
Make the slides (how) - graph

- Use graphs and tables

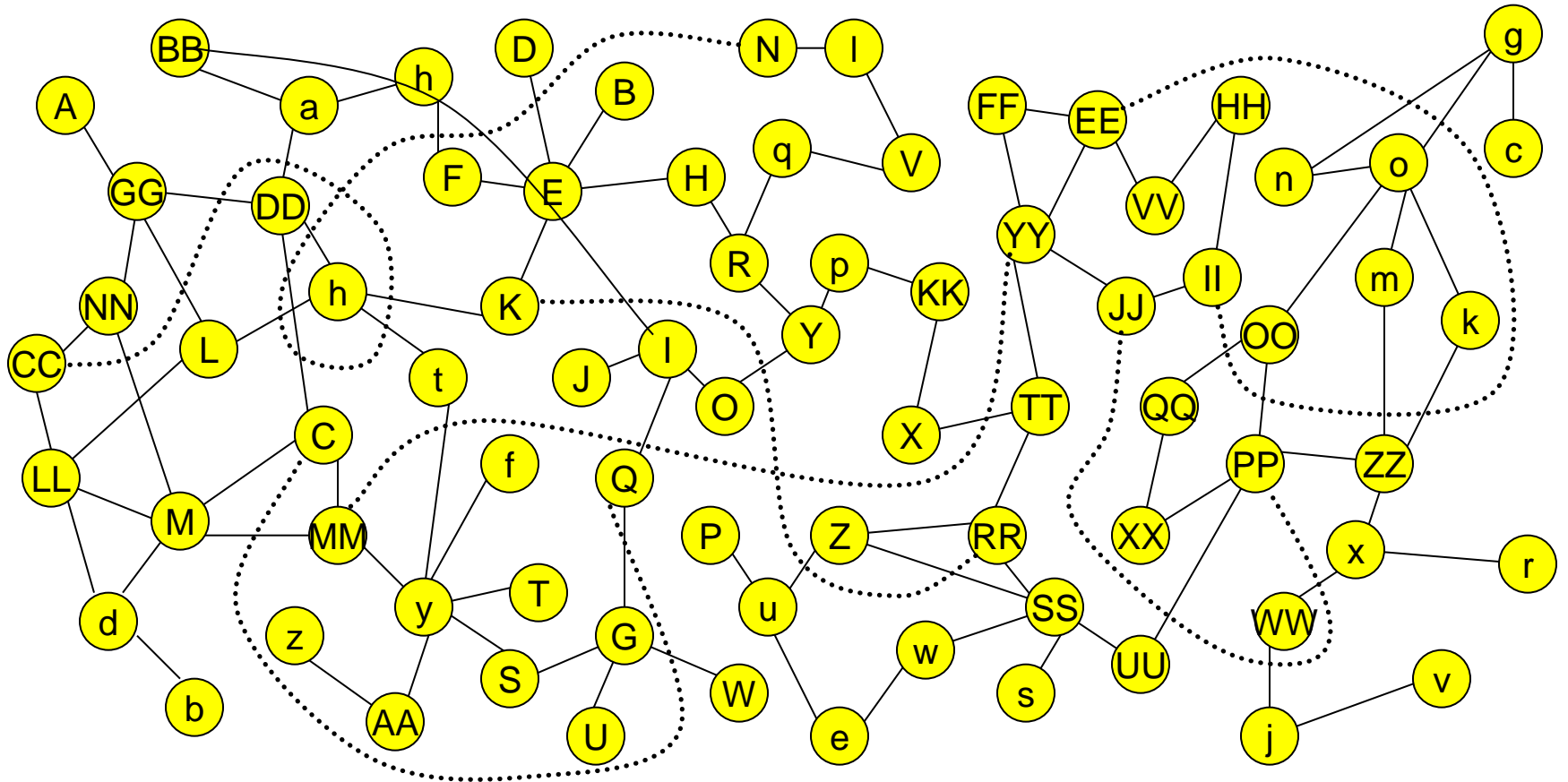
System Architecture

- 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

System Architecture



Make the slides (how) - simple



Make the slides (how) - font

- Font type
 - Serif & Sans Serif

Examples of Serif and Sans Serif Fonts

Serif

Times New Roman
Courier New
Letter Gothic
Georgia

Sans Serif

Arial
Arial Unicode MS
Comic Sans MS
Antique Olive

Make the slides (how) - font

- Font size

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

Tahoma	TNR	Courier	Comic	Lucida Sans
32 pt	32 pt	32 pt	32 pt	32 pt
28 pt	28 pt	28 pt	28 pt	28 pt
24 pt	24 pt	24 pt	24 pt	24 pt
20 pt	20 pt	20 pt	20 pt	20 pt
18 pt	18 pt	18 pt	18 pt	18 pt
16 pt	16 pt	16 pt	16 pt	16 pt
14 pt	14 pt	14 pt	14 pt	14 pt
12 pt	12 pt	12 pt	12 pt	12 pt
10 pt	10 pt	10 pt	10 pt	10 pt

Make the slides (how) - font

- Font size

Appropriate Font Size Based on Size of Presentation Room

No. of Seats	Heading (points)	Main Text (points)
>200	42	36
50 < Seats < 200	36	28
<50	32	24

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.

Make the slides (how) - color

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

- Hmm... 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"