Research Presentation

I MSc Botany

Dr Giby Kuriakose

Purpose of a research presentation

Is not to

- Impress the audience
- Tell them all you know about a subject
- Present every little detail of your work

Is to

- Give the audience a sense of what your idea/work is
- Make them want to read your paper
- Get feedback on your work



© Scott Adams, Inc./Dist. by UFS, Inc.

Know your audience

Who would be there?
 Scientists who are expert in your field
 Scientists who are not expert in your field
 Students/scholars
 Non experts
 Who knows?
 Most likely a mix so have something for all

Know your audience

Keep in mind

□ They might be tired

- □ They can read
- They are thinking "Why should I attend and listen this talk?"

□ Non-experts will tune off within 2 minutes

- □ Experts would do so after 5 minutes
- What can we do?

It is better to do

- Early motivation at the beginning of your talk motivate your research with easy to understand examples. It creates curiosity
- Break the curiosity- State your results in time and in simple terms
- Use apt Visuals Illustrate your idea with images, animations, graphics, tables, diagrams, etc.

Leave them with these thoughts

- The audience understood what the problem was and why it was important, for that am I clear about what I say?
- To have an idea of what the solution was and how it was different/better than others
- Does the presenter knows the literature (i.e. quoted all works) and people might collaborate on this aspect of her research

Use apt examples

Examples are your weapon to

- Emphasize the work
- Illustrate the basic idea
- Explain the solution (to the problem) in action
- Highlight extreme cases or shortcomings

If there is no time introduction shall cut short avoiding examples and too much of narration

Where were you?

- 1. Preprocessing
- 2 1. Preprocessing
- 3 2. Filtering
- 4 3. Texture Extraction
- 5 4. Decision Trees
 - 5. Classification
- People will might get lost during your talk, even those who are listening
 - have a running outline of the main steps of your idea (more than the talk itself)
 - use visual clue to highlight where you are in the process
 - present it at the beginning of each step

Existing Knowledge

- Be familiar with all related work this would provide an impression that how good you prepared with background literature
- Don't list each paper you read
- Mainly talk about results that are immediately related to what you did
- Important references at the end of the talk
- Acknowledge co-authors (in the title slide itself)

Technical details: in or out?

- Don't be too technical, unless the audience are experts
- Present specific aspect that show the "main theme" of your work
- Leave the rest out or give less stress. If you were convincing they will read your publication or they might come to you
- Don't fill up your slides with lots of equations or too much of writings
- Prepare back-up slides, if necessary, to answer major questions. May be at the end of the presentation

The outline of the Presentation

The problem

- Motivation (origin) and goals (Objectives)
- Relevant state of the art (Relevance)
- What is your key idea/contribution
- Why is your approach or method good/better
- What your work and what the future plan or suggestions for future work

Preparing the presentation

- Less is more. Fill in with narration not words
- Use animation sparingly and appropriately
- Use different color to emphasize some points but limit to 2 or 3
- Be consistent! In the choice and use of color font size/type, etc.
- Use slide real state appropriately

Slide layout -

This page contains too many words for a presentation slide. It is not written in point form, making it difficult both for your audience to read and for you to present each point. Although there are exactly the same number of points on this slide as the previous slide, it looks much more complicated. In short, your audience will spend too much time trying to read this paragraph instead of listening to you.

Bad

Slide layout –

Show one point at a time:
 Will help audience concentrate on what you are saying
 Will prevent audience from reading ahead
 Will help you keep your presentation focused



Fonts -

Use a decent font size
Use different size fonts for main points and secondary points

this font is 24-point, the main point font is 32-point, and the title font is 44-point

Use a standard font like Times New Roman or Arial



Fonts -

If you use a small font, your audience won't be able to read what you have written

CAPITALIZE ONLY WHEN NECESSARY. IT IS DIFFICULT TO READ

Don't use a complicated font

Bad

Color -

Use font color that contrasts sharply with the background Blue font on white background Use color to reinforce the logic of your structure Ex: light blue title and dark blue text Use color to emphasize a point But only use this occasionally Good

Color -

- Using a font color that does not contrast with the background color is hard to read
- Using color for decoration is distracting and annoying.
- Using a different color for each point is unnecessary

Same for secondary points

Trying to be creative can also be bad



Background -

- Use backgrounds such as this one that are attractive but simple
- Use backgrounds which are light
- Use the same background consistently throughout your presentation



Background –

Avoid backgrounds that are distracting or difficult to read from

Always be consistent with the background that you use



Graphs -

Use graphs rather than just charts and words

Data in graphs is easier to comprehend & retain than is raw data

Trends are easier to visualize in graph form

Always title your graphs

Good

Graphs -

	January	February	March	April
Blue Balls	20.4	27.4	90	20.4
Red Balls	30.6	38.6	34.6	31.6



Graphs -Items Sold in First Quarter of 2002





Graphs - Bad





Graphs -

- Unnecessary Minor gridlines
- Font is too small
- Colors are illogical
- Title is missing
- Shading is distracting



Pictures-



Preparing the presentation

- Prepare the slides in advance
- Show them to friends
- When you think you are done read them again

Check all animations with the sound on ③

Preparing the presentation

Practice, practice, practice
 Give a practice talk to a general audience

Give a practice talk to an audience of expert

Time your presentation (allow for speed up effect caused by nervousness)

Always assume technology will fail you. Have backups.

Delivering the talk

Be enthusiastic! If you aren't why should the audience be?

Make eye contact with the audience

Identify a few "nodders" and speak to them

Watch for questions. Be prepare to digress or brush off when irrelevant

Delivering the talk

Point at the screen not the computer

Do not read directly from the PPT or your notes

Have the "spill" for the first couple of slides memorized in case you go blank

Finish in time

Handling questions

Different types – handle accordingly
 Need clarification

Suggest something helpful

□ Want to engage in research dialog

Show that he/she is better than you
Anticipate questions
Don't let them highjack the talk (postpone)

How can I get better?

Practice every chance you can

Observe others
 Steal good presentation ideas
 Notice all the things that turned you off

Seek comments from friends and mentors

End the talk with a pleasant note

The impact factor (IF)

The impact factor (IF) - a measure of the frequency with which the average article in a journal has been cited in a particular year.

It is used to measure the importance or rank of a journal by calculating the times it's articles are cited.

How Impact Factor is Calculated?

The calculation is based on a two-year period and involves dividing the number of times articles were cited by the number of articles that are citable.

Calculation of 2010 IF of a journal:

A = the number of times articles published in 2014 and 2015 were cited by indexed journals during 2016.

B = the total number of "citable items" published in 2014 and 2015.

A/B = 2016 impact factor

$$\mathrm{IF}_y = rac{\mathrm{Citations}_{y=1} + \mathrm{Citations}_{y=2}}{\mathrm{Publications}_{y=1} + \mathrm{Publications}_{y=2}}$$

For example, *Nature* had an impact score of 41.456 in 2014:

$$IF_{2014} = \frac{Citations_{2013} + Citations_{2012}}{Publications_{2013} + Publications_{2012}} = \frac{29753 + 41924}{860 - 869} = 41.456$$

h-index

The *h*-index is an author-level metric that attempts to measure both the productivity and citation impact of the publications of a scientist or scholar.

The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other publications