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# How to present a paper

Juho Rousu

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# This presentation

- General hints about presentations, mostly following Spillman & Parberry: How to Present a Paper: A Speakers Guide, 2000. Available in Mycourses at <https://mycourses.aalto.fi/mod/resource/view.php?id=692983>
  1. What to say and how to say it
  2. Getting through the audience
  3. Visual and Aural aids
- Guidelines for the oral presentations in the course

# What to say and how to say it

- Communicate the Key Ideas
  - Make sure that your talk emphasizes the key ideas
  - Skip over what is standard, obvious, or merely complicated.
- Don't get Bogged Down in Details
  - Details are out of place in an oral presentation
  - Aim to give the audience an overview of the work (in a way: an advertisement)
- Know Your Audience
  - Make sure that your talk is prepared at the right level.
  - Think through the average level of expertise in your audience and present your results accordingly.

# What to say and how to say it

- Structure Your Talk
  - A good speaker always lets the audience know exactly where they are and where they are
  - A (long) presentation should be broken into parts which are clearly delineated
- A simple template for talk structure
  - A Introduction
  - B Body
  - C Conclusion
- However, **do not use a “table of contents” slide.** Presenting it uses valuable time that you can spend presenting actual content!

# A The Introduction

- Define the problem the paper is about. For your slides, you will need to condense the description into a few carefully chosen words
- Motivate the audience: For example, try to shortly answer: Why this problem is important? or Why the answer is non-obvious (i.e. worth researching)? or What are the potential impact of solving the problem?
- Emphasize the contributions of the paper: What is new? What is better than previous?
- One goal of the introduction is to make the audience want to hear more

# B The Body

“The secret of being bore is tell everything” – Voltaire circa 1718

- Abstract the key results of the paper. Explain their significance
- You might need to be technical, but avoid swamping the audience with tons of equations or data
- If the key results involve math (theorems) or algorithms, sketch the main results and ideas, as simply and intuitively as possible
- Use pictures (and video, audio if relevant): Pictures sometimes tell more than 1000 words

# C The Conclusion

- Summarize key aspects of the talk
- Hindsight is Clearer than Foresight
  - You can now make observations that would have been confusing if they were introduced earlier.
- Be Open About Problems
  - Science is not perfect, any piece of research has some associated uncertainties and open problems – tell the audience what they are
- Indicate that your Talk is Over
  - To avoid confusion if you have finished or not
  - An acceptable way to do this is to say “Thank you. Are there any questions?”

# Getting through to audience

- Practice your talk
  - Allows you to tune many aspects of the presentation: flow, length, use of technology
  - This also helps with battling nerves: it is much easier to deliver a practiced talk when nervous
  - Give a practice talk to a trial audience (e.g. a friend) or the mirror (you can record in zoom, and watch it afterwards)
- Use repetition:
  - "Tell them what you're going to tell them (the Introduction). Tell them (the Body). And then tell them what you told them (the Conclusion)."
- Don't over-run:
  - A talk that runs over its specified time slot is annoying
  - The perceived quality of the talk is generally inversely proportional to the time it over-runs



# Getting through to audience

- Control your voice
  - Check your headphones and microphones prior to the talk (if any)
  - Speak clearly and with sufficient volume
- Take care with your appearance
  - Dress&groom so that audience do not remember you from how you dressed&groom but from the content of your presentation
  - In online settings, make sure the background does not contain distractions (in zoom you can insert a background mask)
- Keep the focus in the content
  - Don't start with apology "I did not have time to prepare..."
  - Try not to make fighting with presentation technology the main point of your talk (learn how to use it before the talk)
  - You are borrowing time from the audience, make good use of it

# Visual and aural aids

Note: Spillman & Parberry paper was written in 2000 when overhead projector and (sometimes handwritten) transparencies were the norm – presentations with a computer started to become popular in early 2000's. But most hints are still relevant here

- **Make legible slides:**
  - Use font type and size that is readable from a small screen or from a large distance
- **Don't overload the slide**
  - Don't write too much
  - Preferably, each slides is about a one significant issue you want to explain to the audience (for which you can use text, figures, animations to explain)

# Visual and aural aids

- Don't use too many slides
  - As a rule 1.5 to 2 minutes per slide is a good rule of thumb
  - This will give audience time to read the slide (a few times) and understand it
  - Practice your talk to find good time per slide for your presentation style
- Avoid “covering” the slide
  - e.g. revealing list bullets one at a time. This will force audience to be in lock-step with you, which is annoying especially if you know the topic already
  - let audience to read the whole slide and simultaneously listen to you. Make two slides if you think you need withholding part of the content on the slide

# Visual and aural aids

- Use color effectively
  - Use color to make the content more easy to assimilate
  - Don't use wild color schemes just to make things look fancy
- Use pictures and tables to illustrate a point that you are trying to make
  - Not just for the fun of it
- When using video, make sure that the also the audio will get through to the audience!
- In Zoom, learn to use the camera, microphone and slide sharing prior to the talk

# Hints for your oral presentations

- The presentations will be 15 minutes plus 5 minutes for questions
- I recommend having structure roughly like this:
  - Title slide (0 minutes)
  - 2-3 slides for introduction: explain the problem and motivate the audience (ca. 4-5 minutes)
  - 2-3 slides for the methods (ca. 4-5 minutes)
  - 2-3 slides for the results (ca. 4-5 minutes)
  - 1 slide for conclusions (ca. 1 minute)
- For the slides, any software can be used
  - If you wish to use Latex, I recommend using overleaf editor and the “beamer” package  
<https://www.overleaf.com/learn/latex/beamer>