How to give a talk (in CS)

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with help from
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Structure of this Talk

- Motivation
- Background and preparation
- How to give a talk
- Summary and outlook
Motivation

• Purpose of a seminar: **practicing to talk**
• *Non scholae, sed vitae* …
  ▪ engineers (esp. computer scientists) have a reputation of being “nerds”
  ▪ social scientists / business engineers can do nothing but talk – they get the good jobs
  ▪ “soft skills” are often more important than “hard skills”, even and especially in CS!
• We all know “how not to give a talk (in CS)”
• If others can do it well, you can do it as well!
When Do You Need Presentation Skills

• Masters / doctoral thesis’ presentation
• Job interview
• Reporting of project results
• Conference presentation
• Lectures and tutorials
• Advertising an idea to someone with money
• Finding a partner for life
• …
Related Topics

• How to write a dissertation (➡ Sunday)
• How to work in science, what are scientific methods and results
• What are CS specific questions, how to present theory results
• What to expect from a supervisor / mentor
• …
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Usually, in a Student Talk …

• … the speaker is scared
• … the speaker tries to get it over with
• … the speaker covers each and everything
• … the speaker echoes the given text source

• … the audience is bored
• … the audience is not interested
• … the audience is quiet

• … the supervisor is frustrated
• … the supervisor has to assign grades
Can We Improve on That?

• Your lecture is a chance to make things better!
• You have an interesting subject! It is scientifically and industrially relevant, it will alter the course of the world!
• You can use this time to practise things useful for your own life! It is a unique chance!
• Not the seminar is important, you are! This is your chance to present yourself, your preparation, your skills, your personality!
• Nobody will hurt you here, all others are in the same situation as you are! You can use the opportunity to give and take some valuable feedback!
Preparation

• You all have your slides, so I won’t talk on
  ▪ **structure:** content, intro, main, summary
  ▪ **style:** header, one thought, max. 7 items, …
  ▪ **layout:** font size >18pt, decent colouring, …
  ▪ **formulation:** keywords, short formulas, …
  ▪ **design:** meaningful graphics, clipart, …
  ▪ **presentation:** overlays, changes, …

• Have you considered using the whiteboard?
  ▪ tablet PC as the ultimate presentation aid?
  ▪ multi-media means using multiple media!
Before You Begin…

• Make sure the technology is working
  ▪ **YOU** are responsible for your notebook
  ▪ **YOU** are responsible for the projector
  ▪ **YOU** are responsible for the whiteboard

• Make sure everything else is ok
  ▪ need a glass of water?
  ▪ need to take off or put on your sweater?
  ▪ need something to point or hold in hands?
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Thesis

- You can
  - for *any* subject
  - to *any* audience
  - in *any* time frame
  give a meaningful talk

- Method
  - know your subject
  - know your audience
  - know your timing
Know Your Subject

• You have read and understood your chapter, so explain what you understood!
  ▪ not: “I considered this difficult, why should it be easy for the audience”
  ▪ not: “I haven’t understood this, so I’ll try to get around it”
  ▪ why do you give the talk, what is the purpose?

• Don’t try to cover your topic, uncover it!
  ▪ not: “There is much more to say, so I’ll jam in as much as possible”
  ▪ select a relevant example, not the general case
  ▪ one main thought, several hints
  ▪ background knowledge
Know Your Audience

• The audience wants to be entertained
  ▪ what is the added value of your talk compared to reading the book or watching a recorded lecture?

• Three levels of information in each talk
  ▪ introductory (what is it about)
  ▪ intermediate (what are the main aspects)
  ▪ advanced (what are the details)

• At most one main idea
  ▪ “tell them what you’ll tell them, then tell them, then tell them what you’ve told them”
  ▪ be self-contained, but not boring
Know Your Timing

• Don’t go over time
  ▪ two to three minutes per slide (w/o toc)
  ▪ the slides guide your talk, don’t jump back and forth
    - nowadays it’s easy to copy!

• Don’t leave anything out, don’t hide slides
  ▪ no overlays, no secrets
  ▪ skipping slides only in extreme cases
  ▪ demos are impressive, but risky!

• Leave room for discussion
  ▪ you may even provoke discussion
Presentation Tricks

• Capture attention
  ▪ examples from everyday life
  ▪ comparison to known situations
  ▪ jokes, cartoons

• Arise interest
  ▪ why is this important to know or understand?
  ▪ what are the audience’s personal benefits from this?

• Repeat, repeat, repeat
  ▪ summarise, explain in other words
  ▪ associate to a different context

• Try to capture late-comers
  ▪ give clear hints when they can join in
    (we have seen that … now we will look at …)
Rhetoric

- Be honest
  - show that you like what you’re talking about
  - if you don’t, then make a better suggestion
- Keep your voice adequate
  - don’t whisper, don’t shout
  - the accentuation supports the message
- Be spontaneous
  - a talk is not the playback of a recording
  - say it in your own words
- Be lively, but not hectic
  - a talk is a stage performance
Body Language

- Be yourself: you are the focus of attention
  - don’t hide behind your slides, don’t stand aside
    - slides support the talk, they don’t replace it
  - never talk with your back to the audience
    - always talk to your audience, not to the wall

- Try to form a bond with your audience
  - seek eye contact, read from the faces
    - distribute eye contact between several people
  - show your open hands
    - no barriers, no hiding
  - smile! 😊
How to really support your talk with your body…
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Summary and Outlook

• Important aspects: subject, audience, timing
• Repetitions, built-in resumption points
• Committed but natural behaviour

→ Let’s see what you can make from that!

Thank you for your attention!