Presentations

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(mostly based on material by Christian Kästner, Graham Horton)
Presentations at student conference

- 15 min Presentation (25 for two people)
- 10 min Question & Answers

- Finish late: cut off
- Finish early: more questions

- 3 Presentations per session
  - Agree on one notebook or prepare/practice to switch
Preparation

- Prepare for a talk!
- Preparation takes time (20x time of actual presentation)
- Do not prepare slides the evening before!
Presenting Scientific Results

Before writing a paper
- Present ideas to colleagues for discussion
- Put your ideas into order
- Think about visualizations

After writing a paper
- Presenting an accepted paper at a workshop or conference
- Give a rough overview: Problem, Solution, Evaluation
- Convince audience to read the paper
- Initiate a discussion (workshop)

Paper and presentation often do not perfectly align
(Lecture != Presentation)
Paper versus presentation

- In both:
  - motivation
  - clarity
  - structure

- In presentation:
  - Less time
  - Fixed time
  - Your presence matters
Prepare for a very large room
Workshop Room
What makes a successful presentation?

- **Facts**
  - Content
  - Structure
  - Cohesion / line of thoughts

- **Visuals**
  - Design of slides
  - Visualizations

- **Appearance**
  - Body language
  - Language
  - Subjective impression
Goals

- Every presentation has a goal
- Every presentation has several tasks

Answer these questions first:

- What is my goal?
- What is my main point?
- Why should the audience listen?
- Why is the topic interesting?
- Who will benefit from this presentation?
Structure

- **Beginning:** Connect to audience
  - Introduce yourself
  - Motivate your topic (why should they listen?)
  - Executive summary (main points, main results)
  - (Calm down)

- **Middle:** Convey information
  - Facts, Arguments, Results, Discussion

- **End:** Take home message
  - Summarize main points
  - Emphasize consequences
  - Future work
Beginning

- What is the general problem?
- Why is this problem interesting?
- What is the specific problem?
- Why is this problem interesting?
- Which question(s) to answer?
- (State of the art)
- How to proceed and why?
- Goals and tasks?
Middle

- What background knowledge is necessary?
- Which problems need to be solved?
- Which decisions to make?
- Which assumptions/simplifications and why?
- Experiments
- Results
- Interpretation
- Does this answer my hypothesis?
End

- What was the main result?
- How general are these results? (threats to validity)
- What are the consequences?
- What remains open? Which new questions arose? Future work?
- Thank for attention
Typical problems

- Too quick introduction
- Problem remains unclear
- Consequences / results unclear
- Too much “what I did”
- Too little “why did I do this (each step)”
- Too little “what’s the point”
- No connection between thoughts / slides
- Missing cohesion
Technical Hints

- 20 min, about 7 to 15 slides
- Fontsize $\geq 18$, sans-serif fonts (this is 29)
- Name, title and affiliation on every slide
- Slides number on every slide
- At most one topic per slide
- Visualization, colors where necessary
- Avoid overfull slides (> 7 objects or > 36 words)
- Avoid full sentences, instead summarize content using headwords.
Structure slide?

- Only if you have something to say
- Maybe only after motivation slides

Agenda

- Problems and Advantages of Preprocessors
- 4 Improvements
  - Views
  - Visual Representation
  - Disciplined Annotations
  - Product-Line-Aware Type System
- Summary and Perspective
Visualizations

- Assists memory
- Assists comprehension
- Emphasizes the content
- More accessible style

- If
  - Meaning is clear
  - Visualized content is correct
  - Text is readable
Different kinds of visualizations

- Diagrams
- Photos
- Clip-arts
Simplify visualizations

- A microprocessor consists of X, Y and Z...

Figure 1. Pentium block diagram.
Animation

- Use animation with care

- Use
  - to focus attention (~ laser pointer)
  - to visualize a process / several steps

- Do not use without specific purpose
\( f \) invoked again! 😞
Animation: Die Todsünde

- **Punkt 1**  Blah blah blah blah blah blahblah
  - Punkt 1–1  Blah blah blah blah blah blah
  - Punkt 1–2  Blah blah blah blah blah blah

- **Punkt 2**  Blah blah blah blah blah blah blah
  - Punkt 2–1  Blah blah blah blah blah blah
  - Punkt 2–2  Blah blah blah blah blah blah

- **Punkt 3**  Blah blah blah blah blah blah blah
Abläufe visualisieren

Erklärung eines Warteschlangensystems:
Checklist for visualizations

- Can text be replaced by visualizations?
- Is the meaning clear?
- Are the facts correct?
- All texts and details readable?
- No unnecessary or misleading elements?
- Does it help comprehension?
Presentation
Communication

- You cannot not communicate

**conscious level**
- Information

**unconscious level**
- Body language
- Personality
- Appearance
- Feelings
Where to stand

- Facing the audience
- Not too far away

- Don’t hide the projected image
- Don’t hide behind furniture
Posture

- Upright
- Open
- Relaxed
- Stable
Movement

- Don’t fidget
- Emphasize thoughts with gestures and facial expressions
- Calm, but not fixed
Eyes

- Look at the audience
- Try to look at everybody naturally
- Do not stare at screen
Voice / Language

- Slow enough
- Loud enough
- Clear pronunciation
- Enough pauses
- Avoid monotony

- Keep sentences simple
- Don’t read
Timing

- Practice timing
- If faster when nervous plan ahead
- Have a timer during presentation
- Check speed during presentation

- Practice fast and slow version of last 3 slides (maybe have an extra slide you might skip)
Some Last Tips

- Always be prepared
  - Have a PDF version of your slides
  - On at least 2 USB sticks & internet
  - Prepare presentation before the session, usually only one laptop
- Laser pointer hard to see in large rooms -> animations instead
- No dress code in computer science conferences
- Practice timing and phrasing!
Feedback & Grading

- 6 Criteria
  - Motivation and goals clear?
  - Content (structure, cohesion, clarity, conclusion?)
  - Slides (amount, style, visualizations)
  - Presentation & body language
  - Clarity (understandable, slang, missing background inform.)
  - Timing (don’t be late!)

- Feedback sheet for everybody
Take-away slide

- Prepare for a presentation
- Make goals and motivation crystal clear
- Careful slide layout with visualizations where suitable
- Calm and focused presentation