Introduction to Seminars

Philipp Slusallek

Computer Graphics
Saarland University
Overview

- Motivation
- Literature Search
- Presentation
- Report
Motivation

• **Seminars**
  – Introduction to and training of scientific work
    • Structured information search
    • Public presentations
    • Written reports
  – Fundamental techniques for your daily work
    • In almost all of your potential future jobs
  – Major component of your education
    • Self motivation
    • Self organisation (schedule!)
    • Really needs more than two seminars
  – “Secondary” effect: Learning about the scientific content
Literature Search

• Why?
  – Reuse knowledge from others
  – Do not reinvent the wheel
  – Obtain overview of scientific area
  – Structuring and delimiting the area of interest

• Two-Phase Process
  – Browsing literature to obtain an overview
  – Detailed reading of relevant references
Browsing of Literature

• **Goal: Overview – NO DETAILS !!!!**
  – Detect important issues

• **Iterative process**
  – Start with overview papers: extract keywords and references
    • Teaching books
    • Web
    • General subject literature: CACM, IEEE Computer, ...
    • Popular science journals can be very informative but not deep
      – E.g. c`t
  – Data mining in found literature
    • Keyword search in WWW
      – Internet search machines (e.g. Google)
      – Link collections
    • Keyword search in (e-)libraries
  – Recursion
    • New references in relevant papers
    • New keywords
Browsing of Literature

- **Avalanche: Continuously check relevance (pruning)**
  - Ignore things not relevant for your topic
  - But randomly sample seemingly irrelevant pointers
    - You might be missing something

- **Systematic structuring**
  - BibTeX, HTML, Database, notes, post-its on the wall, ...
  - Write down important information
    - Important citations (who, what, when, where, ...)
    - Your own abstract of the paper (very important!!!)
      - Summarize most important contributions (to your problem)
    - Your own thoughts during reading

- **Start with recent references**
  - Only this allows to obtain other recent references
    - But often focuses on niche issues
  - First references of an area are often most helpful as overviews
    - More general, motivate the area, provide overview, ...
Detailed Reading

• **Before you start:** Write down your questions
  – What do I need to learn from this paper?
  – What is still unclear?

• **During reading:** Write down important issues
  – Cross references on topics covered in other papers
    • Build a network of references (also help your memory)
  – Document terminology (and their differences)
    • Equivalence (and non-equivalence) of notations and terms

• **After you are finished:** What did I get out of it?
  – Which new questions did arise?
  – How could I answer them?
Goal: Comprehension by listeners !!!!!!!
• **Listeners**
  – Who is coming?
  – What is their background?
  – What is the environment for your talk?
    • Style, terminology, level, discussion?
  – Which questions do you expect?

• **Planning**
  – **Familiarize yourself with the environment !!!**
  – What is the motivation of you listeners?
    • Why should they be listening to me?
  – How can I reach them?
  – **What is the right level !!!**
  – Questions for integrating listeners
Presentation

• **Organization**
  – Present structure to listeners
    • Repeat the overview to pick up lost listeners
  – Say, what you want to say
    • Motivation: Setting and overview
    • Problems
    • Solution strategy
  – Say it
    • Clear line of narration
    • From simple to complex issues (sometimes in reverse)
      – Storytelling !!!!
      – As in a murder story
  – Say, what you said
    • Summary
    • Your judgment (clearly separated from content)
    • Open questions, spurring a discussion, ...
Presentation

• **Form**
  – Cover slide with title, name and affiliation
    • Speak about it (start talking about the topic)
  – Slides are for supporting to listeners (not for you) !!!
    • Only keyword, so sentences !!!
    • Figures and images instead of too much text
    • Few formulas and animations
    • Color and bold/italics are important for emphasis (only)
      • About 2 minutes per slide
      • Maximum of 8-10 lines of text per slide
      • Do not partially cover slide
  – Have extra slides for anticipated questions ready (e.g. details)
  – Make sure people know when you are done
    • A simple „Thanks“ or „Are there questions?“ is enough
  – Test talk with timing is mandatory
    • You are likely to be faster in the real talk, though
Presentation

• **Organize your environment**
  – Make sure devices and tools are there and work
    • Notebook, projector, software (version, movie players, codecs, ...)
    • Slides, black/whiteboard, chalk, pens, ...
  – What will you be doing where?
    • Where do you stand?
    • Where will you place slides and notes, etc.?
Presentation

• Probleme
  – English versus German terminology ➔ Consistency
  – Only present things you fully understand
  – Not too much material (speak normally), not too many details
  – Tell a story – do not simply enumerate facts
    • Motivate each topic, show how they are interconnected
  – End with a list of open questions (controversial)
    • Helps start discussions about your topic
    • It feels bad if no questions are asked
  – Your own judgment is important (separated at the end)
    • Present it clearly in a non-aggressive, well-supported way
  – Speak freely, do not read your notes
  – Try to avoid any “Ääääääähhhhhhhmmmmmmmm”
    • There are many opportunities to train speaking
  – Look at people
    • Face the listeners and watch them
    • Be aware of your body language
Report

• We will make a „meta-report“ available on the web site
  – Text describes how to write a report
    • Read it to understand what is important
  – It is itself a report
    • Look at the report, as an example you can build on
    • It includes images, a bibliography, and some more
  – You get the LaTeX source code
    • You can quickly prepare your report in LaTeX using this as a template
    • Cut and replace works great!
    • Gets you started easily and without too much pain