Seminar on Scientific Soft Skills

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Today's plan

- Finish paper assignment

- English grammar practice

- Lecture on
    - Paper reading
    - Presentation
    - Review process & paper reviewing
    - Paper writing

Upcoming deadline

- **Next week:** 5-minute student's work presentations

    - ❑ Introduce yourself
    - ❑ Past work
    - ❑ Current research in general, its relevance
    - ❑ Your current work / project. Why this? Expected results? Publication plan.

    - ❑ Images, examples, something we can all understand.

Paper reading

Based on Lukáš Maršálek's slides. Thanks!

Rule

Never **trust** anything you read in papers

- Analyze, think, then either accept or reject.
- Watch for test cases – they are often wisely engineered.

Advice

- Never trusting can be disturbing.

- You can **trust books**.

  - Make sure to read the books before papers.

Processing articles

- Huge number of articles

- Scan
    - evaluate relevance

- Read
    - understand it

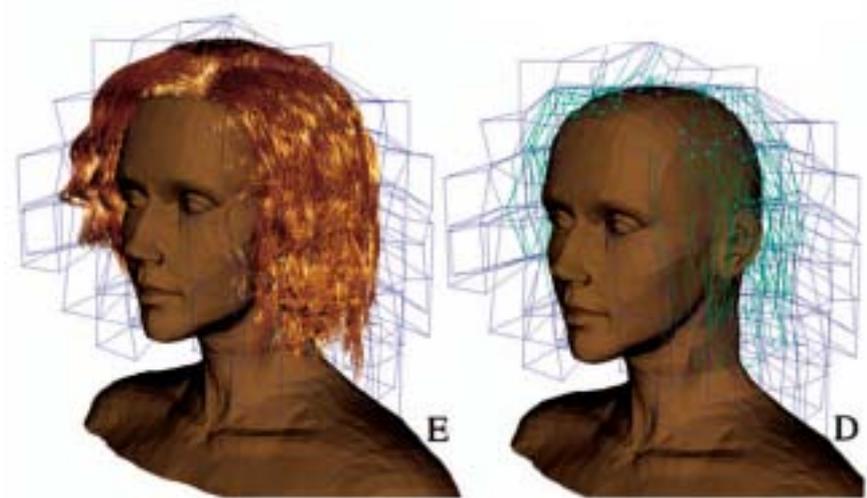- Put it down
    - save it for future use

Image used from Real-Time Animation of Complex Hairstyles by Vollino and Magnenant-Thalmann

Scanning

- ## Evaluate article relevance
  - avoid being burried

- Introduction
- Results
- Discussion
- Summary
- Figures

- If relevant, note it somewhere.
  - Why the heck did I want to read this paper?

Do I need to bother?

Enough info to start bothering later

Reading

- Understand the article in depth

- More than one read necessary

- Find flaws and shines
    - when it fails
    - when it works

Putting it down

- Save for future use
  - be able to start bothering later

- Write down full BibTeX entry

- Short summary
  - "scanning level"
  - principle
  - best and worst cases
  - fundamental omissions
  - **How is it relevant to what I do?**

Presentation

Based on Lukáš Maršálek's slides. Thanks!

My Advices

- **Everything needs time to settle**

- Do it, let it rest for a while, then get back to it and judge.

My Advices

- **MANY iterations!**

  - Ideally **fresh audience** for each

  - Don't refuse getting rid of stuff that took you long to prepare but does not work

  - You are the worst judge of the quality of your talk
    - Do listen to your rehearsal audience comments

My Advices

- **Your audience does not know what you know!**

  - Know your audience & gauge its knowledge

  - Give a proper intro

    - But only after you've shown a teaser of what you will get to at the end.

  - A golden rule of any professional (and non-professional) communication.

In this seminar – A 3-stage process

- 1st time in seminar = 1st time in public
    - But DO rehearse before (otherwise it's a waste of time)

- Pair up with somebody
    - At least one practice talk offline, rather two

- 2nd time in seminar = final result
    - Nice & clear

Resources to read before you start

- Ramesh Raskar
  - http://www.slideshare.net/cameraculture/how-to-give-a-good-talk
  - (and possible also some references therein)

- Fredo Durand
  - http://people.csail.mit.edu/fredo/TalkAdvice.pdf

- Some technical hints & things to avoid
  - http://cgg.mff.cuni.cz/~kmoch/downloads/

- Conflicting advice – pick what you like

Publication cycle (CG oriented)

Overview

- Write a paper

- Submit to a conference / journal

- Get reviews
  - If rejected – revise – resubmit (or publish as a techreport)

- Revise, send updated version

- Present at the conference

Where to submit

- Ask your advisor
- Conferences (by impact)
  - SIGGRAPH, SIGGRAPH Asia
  - EUROGRAPHICS
  - EGSR, I'3D, HPG, PG

- Journals (by impact)
  - ACM Transactions on Graphics (TOG)
  - IEEE Trans. On Visualization & Computer Graphics (TVCG)
  - IEEE Computer Graphics & Applications
  - Computer Graphics Focum

Paper submission

- Paper itself

- Supplemental documents, images, animations etc.

SIGGRAPH (Special issue of ACM TOG)

- **Reviews**

- **Rebuttal**
  - Just answer questions and clarify
  - No fighting

- **Acceptance / rejection decision**

Review process from the other side

- Actors
  - Paper chairs (1 or 2)
  - Papers committee (tens)
  - Tertiary reviewers (tens – hundreds)

1. Paper sort
2. Review writing
3. Discussion
4. Decision

Paper sort

- Chairs

- Assign papers to committee members
- 1 primary, 1 secondary
- Primary looks for 2-3 external (tertiary) reviewers

Review writing & discussion

- Primary, secondary, tertiary (external) reviewers.

- EGSR-style
  1. Write reviews independently
  2. On-line discussion
  3. Papers chair can intervene if not converging
  4. Primary suggests a decision
  5. Approved by all reviewers & papers chair

Review writing & discussion

- SIGGRAPH-style

1. Write reviews independently
2. Reviews sent to the authors
3. Rebuttal received
4. On-line discussion
5. Papers chair can intervene if not converging
6. Primary suggests a final decision (accept, reject, refer to TOG, discuss at committee meeting)
7. Approved by all reviewers & papers chair

Writing reviews

Writing reviews

- Code of conduct – provided by the conference / journal

- Review form

- Your duties as a paper reviewer
    - Fairness, clarity, professionalism, reliability

Paper writing

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    ❑ Don't refuse getting rid of stuff that took you long to prepare but does not work

    ❑ You are the worst judge of the quality of your paper
        - Do listen to your reviewer comments

My Advices

- **Your audience does not know what you know!**

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My advices

- Form is important
  - If paper looks ugly and does not read well, people do not think you are presenting a good work.

- Intro: Explain why relevant & motivate to read further.

- Paper is a story

- Each paragraph has a message / purpose
  - Annotate your own writeup.

- Consistent terminology & notations!

My advices

- Paper is a story

- Each paragraph has a message / purpose
  - Annotate your own writeup.

- When you explain D, have you already said A, B, C?

Resources on writing

- **Ramesh Raskar**
  - http://web.media.mit.edu/~raskar/ForStudents/

- **Fredo Durand**
  - http://people.csail.mit.edu/fredo/PUBLI/writing.pdf
  - http://people.csail.mit.edu/fredo/FredoBadWriting.pdf

If you want to write a BAD paper

- Write a purely descriptive one

    - We did this, we did that, and we did that other thing

    - Don't discuss alternative choice

    - Don't comment results

    - Don't provide take-home messages

(From Fredo Durand, but it's true, I swear)