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

- Images, examples, something we can all understand.
Paper reading

Based on Lukáš Maršálek’s slides. Thanks!
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 buried

- Introduction
- Results
- Discussion
- Summary
- Figures

Do I need to bother?

Enough info to start bothering later

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

- 1\textsuperscript{st} time in seminar = 1\textsuperscript{st} 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

- 2\textsuperscript{nd} 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

- Some technical hints & things to avoid

- 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 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
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 paper
    - Do listen to your reviewer comments
My Advices

- Your audience does not know what you know!
  - Know your audience
  - 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.
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/](http://web.media.mit.edu/~raskar/ForStudents/)

- Fredo Durand
  - [http://people.csail.mit.edu/fredo/FredoBadWriting.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)