Seminar Computer Vision

New research results in the field of Computer Vision and Image and Video Processing
About me

Visualization

Image-based Rendering
Image and Video Editing

Rendering

Augmented / Virtual Reality

Image and Video Editing
About you
What?

- Goal: Introduction to working scientifically
- Individual topics
- Tasks:
  - **Paper** (research publication) read and understand
  - Extract and present **Fundamentals**
  - **Feedback** for presentation of other participants
  - **Presentation** of the paper and discussion
What is the outcome? — **Fundamentals**

- Read the paper and **extract topics** required as background knowledge
- Choose appropriate number of topics and **prepare talk with one partner**
- Present an **educational talk** on the topics to provide the necessary background knowledge for the final talks
  - 20min max
  - 10 minutes of discussion
  - Intuitive, visual explanation more important than details (think about the take away for the audience)
- **Discuss** fundamentals talks to improve your final talk
  - Everyone gives feedback to every talk

- 1 presentation day in the middle of the semester
- Slides can be in any template you like
What is the outcome? — Review

- Give feedback on the fundamentals talk (live)
- Write feedback during the talks and hand out notes to presenters
- Pay attention to:
  - Is a motivation given?
  - Is the technique described in a way understandable also for non-experts?
  - Are equations explained thoroughly? Are the diagrams and images correct and correctly cited
  - Are references given for every statement?
  - Is the content described in an understandable way? Are there still open questions?
  - Are references given for further reading?
  - ...

What is the outcome? — Final Presentation

- Slides can be in any template you like
- Presentation
  - 20 minutes max
  - 10 minutes of discussion
  - Intuitive, visual explanation more important than details (think about the take away for the audience)
- 1-2 presentation days

- Send presentation as PDF to seminarcv@cg.tu-bs.de at least 1 day before your talk
Grading criteria

- Compliance with mandatory deadlines
- Communication with advisor in case of troubles
- **Bachelor or Master students**
  (related to expected quality and depth of the presentation and summary)
- Active participation in the review process
- **Quality of the fundamentals (30%) and final talk (70%)**
- **Main focus: Quality of slides and presentation**
  - The goal is not to show that you know your stuff, but to explain it to the audience in an intuitive and understandable way!
- Necessary requirement passing the course
- Graded requirement for passing the course
If you make a statement, you must also provide a corresponding source! For EVERY statement! Otherwise the part is deemed to have been claimed by you and you must prove that the statement is correct.

**Don’t copy text from others!** Unless you cite the source and there is a good reason to copy. Mark the cited text with „…“ followed by the reference.

**Don’t copy images from others!** It is only allowed if you cite the paper (not the website) where it is from and if you refer to the image in your talk/text.

Otherwise this is plagiarism and can have serious consequences for you!

- In the worst case, it can lead to de-registration!
Generative AI Tools, like ChatGPT, are allowed but:

- You need to mark everything where and how you used the AI Tools
- Every slide/text, where you used an AI Tool needs to be marked
- YOU are responsible for the result, not the AI Tool
Help

- Website contains two useful resources:
  - Link to a good scientific talk
    - Analyse why it is good!
    - How do they manage to explain even complex mathematical content in an understandable way?
    - How do they use text? And how often?
  - Link to an excerpt for scientific writing
    - Main focus is writing scientific articles for journals
    - It is a „How-to-debug your paper“ manual
    - Not necessarily everything applies for you, but many useful guides in there
Dates

See website https://graphics.tu-bs.de/teaching
Topics

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