Advanced Deep Learning for Computer Vision
What is this course about

• Presentation of advanced Deep Learning methods for various Computer Vision tasks

• Focus on new methods, some of them presented only this year! There will be extra references, many opportunities for you to dig deeper into the topics

• Research-oriented course
While we go over new methods...

• You have to come up with your own ideas to solve a specific vision problem!

• Strong focus on the practical side: semester-long project where you can put all the knowledge to practice
IMPORTANT

• The project is VERY time-consuming, we are aware.

• Since the project is done in teams of 2, we want to avoid students dropping mid-semester!

• Please think carefully whether you have the time this semester to dedicate a lot of time to ADL4CV, if not, we kindly ask you to consider to take the course another semester.
Course organization
About the lecture

• Theory: 8 lectures
  • Every Monday 10:00-12:00h & Friday 14:00-16:00h
  • Seminar Room, 02.13.010 online!

• Practical:
  • Project to be done in groups of 2 (non-negotiable!)
  • Presentations during the semester (we will see how)
  • Final poster presentation

https://dvl.in.tum.de/teaching/adl4cv-ws20/
Grading system

• Exam: tbd
• Review: 2 review sessions

• Practical part = 2/3 of the grade
• Exam = 1/3 of the grade

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Project deadline

• 06.11., Friday: project presentation
• 13.11.: project assignments (projects <-> TAs)
• 23.11., midnight: deliver a 1 page abstract of your idea for the project.

• Until 27.11.: Evaluation of the project and feedback
Project evaluation

• Presentations: everyone needs to attend!

• First presentation: first results, challenges
  – 11.12: Groups #1
  – 14.12: Groups #2
Project evaluation

- Presentations: everyone needs to attend!
- Second presentation: almost final results, new things you tried
  - 22.01.21: Groups #1
  - 25.01.21: Groups #2
Project evaluation

- Presentations: everyone needs to attend!

- 08.02.21.: final deadline on report (deadline midnight)
  - Max 4 pages using CVPR template

- Final presentation = virtual POSTER
  - Date 12.02.21. 14:00-16:00
Grading system

- Exam = 1/3 of the grade
- Practical part = 2/3 of the grade
  - Presentations (2 oral pres. + 1 poster) = 1/3
  - Final report = 1/3
  - Code/submission = 1/3
Following up with the projects

• Each project will be assigned to a TA and you will have weekly office hours to discuss the progress

• These will be announced after the projects are approved
Slides

• Moodle is set up! Lecture will be entirely online.
• Slides will be posted on Moodle and on the website:
  https://dvl.in.tum.de/teaching/adl4cv-ws20/

• Questions regarding organization of the course:
  adl4cv@dvl.in.tum.de

• Emails to our individual addresses will not be answered!
Teams

• Teams of two per project!

• Moodle is set up!

• If you do not have a team
  – Chat after the lecture
  – Post it on Moodle
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