

# Advanced Deep Learning for Computer Vision

#### The Team



#### Lecturers

Prof. Dr. Laura Leal-Taixé

Prof. Dr. Matthias Niessner







Tim Meinhardt



Maxim Maximov

#### 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: 12 lectures
  - Every Monday 10:00-11:30h & 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-ss20/

### 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

- 24.04., Friday: project presentation
- 04.05.: project assignments (projects <-> TAs)
- 11.05., midnight: deliver a 1 page abstract of your idea for the project.

• Until 15.05.: Evaluation of the project and feedback

#### Project evaluation

• Presentations: everyone needs to attend!

- First presentation: first results, challenges
  - 08.06: Groups #1
  - 12.06: Groups #2

#### Project evaluation

• Presentations: everyone needs to attend!

- Second presentation: almost final results, new things you tried
  - 06.07.: Groups #1
  - 10.07: Groups #2

#### Project evaluation

• Presentations: everyone needs to attend!

- 20.07.: final deadline on report (deadline noon)
  - Max 4 pages using CVPR template

- Final presentation = POSTER
  - Date 24.07. 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-ss20/

• 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

### Project Timeline

- April 24<sup>th</sup> Project proposal presentations
- May 4<sup>th</sup> Projects Assignments (and TA assignments)
- May 11<sup>th</sup> Abstract Submissions (midnight)
- Until May 15<sup>th</sup> -> Feedback Projects
- 8th + 12<sup>th</sup> June -> First presentations (group #1, #2)
- 6th + 10<sup>th</sup> July -> Second presentation (group #1, #2)
- July 20<sup>th</sup> -> Deadline report (noon)
- July 24<sup>th</sup> -> Poster Presentation (14-16h)



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