

# Advanced Deep Learning for Computer Vision

# The Team

## Lecturers



Prof. Dr. Laura  
Leal-Taixé



Prof. Dr. Matthias  
Niessner

## Tutors



Dave  
Chen



Yawar  
Siddiqui



Guillem  
Brasó



Ismail Elezi

# 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 =  $\frac{2}{3}$  of the grade
- Exam =  $\frac{1}{3}$  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](mailto: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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