Computer Vision and Deep Learning for Autonomous Driving (CVDLAD)

Introductory meeting - Summer semester 2021

PD Federico Tombari Tutors: Nikolas Brasch, Shun-Cheng Wu, Mahdi Saleh

Seminar contents

• The seminar includes a selection of the most recent and relevant papers in the field of computer vision and deep learning for autonomous driving



Seminar contents

• The seminar includes a selection of the most recent and relevant papers in the field of computer vision and deep learning for autonomous driving



Goals

- You are going to learn:
 - about the state of the art in Computer Vision and Deep Learning
 - about current challenges in Autonomous Driving

- And also:
 - how to read and understand a scientific article
 - how to give a tech talk to an audience, and related Q&A
 - how to condense a scientific topic into a short and precise article for a broad audience

Seminar Schedule

- 4 sessions (likely on Friday) + 1 introductory lecture
- 3 presentations per session (around 30 min each in total)
- For some sessions, we will have external talks from industry experts
- Virtual meeting over Zoom

- Paper assignments:
 - selected students can express up to 3 preferences
 - We will then match them to a paper and tutor trying to maximize global happiness

Presentation

- Each presentation is 15-20 minutes + 10 minutes for Q&A
- Slides templates (Powerpoints, Latex, ..) provided on website

- The presentation should cover all relevant aspects of the paper
 - Introduction and state of the art
 - Main contribution(s)
 - Experimental results
 - Discussion, summary and future work
- The presentation should be self-contained
- All students are expected to attend all presentations and interact during Q&A (this will influence your final mark)

Blog article

- The blog article should summarize the paper in the way it has been presented during the talk, and provide the student's opinion concerning the main contributions and impact
- Language: English
- Once ready, send the article to supervisor, within two weeks from the day of the presentation
- Format: <u>Gitlab.Irz.de</u> Markdown
- Size: Around 2000-3000 words
- Examples: <u>GcGAN</u>, <u>MonoDepth</u>



Name	Last commit	Last update
🖨 img	Upload New File	1 year ago
M* README.md	Update README.md	1 year ago
\smile		
README.md		
Example Blog Post		
Introduction		

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus

Evaluation criteria

- Quality of presentation (slides and speech)
 - Quality of the talk
 - Quality of the slides
 - **Q&A**
- Quality of the blog article
- Interaction and participation during the other talks

Application

- Register your choices via <u>TUM matching system</u>
- To increase your chances you are encouraged to submit a motivation letter:

cvdlad@mailnavab.informatik.tu-muenchen.de

- Name and email
- Study program and semester
- A text summarizing your motivation
- (not mandatory) you can submit your latest CV, transcripts of records or both
- **Deadline 16.02.2021**

Any questions?