

# **Deep Learning - MAI**

Theoretical Presentation guidelines

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#### In a nutshell

- You must read, explain and criticize a recent deep learning paper
  - Nothing to deliver to the lecturer

- You must prepare a 10-15 min presentation
  - At 15 min you will be STOPPED. Leave yourself some margin.

Questions from lecturer and fellow students will follow (5 min)



# Which papers?

- Peer-reviewed, highly cited conferences/journals
- Last 3 years max
  - NeurIPS
    - https://proceedings.neurips.cc/paper/2020
    - https://proceedings.neurips.cc/paper/2021
  - ICLR
    - https://iclr.cc/virtual\_2020/papers.html
    - https://iclr.cc/virtual/2021/papers.html



# Which papers?

- ✤ ICML, ECCV, ICCV
- KDD
  - https://www.kdd.org/kdd2020/accepted-papers
- ECAI/IJCAI
  - https://digital.ecai2020.eu/accepted-papers-main-conference/

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## Which papers?

Pick one you like from the proposed sources ( other sources are

acceptable as long as they are peer reviewed and highly cited)

- Must be related with the course content
  - CNNs, RNNs, Transfer learning, Transformers, HPC + DL
- The lecturer MUST VALIDATE your choice (mail)
- Post your selection in the forum. Be sure no one has picked it already



### What to present?

- Describe the paper itself, and provide constructive criticism on it.
- Incomplete and non-compulsory list of things to discuss:
  - What is the main contribution of the article?
  - How could this paper be extended by more experiments or analysis?
  - Are there flaws in the paper methodology?
  - How reliable are the findings?
  - What consequences / future work can derive from this paper?



#### **General tips**

- Read related work (citations of the paper) when relevant and necessary
- Don't waste too much time on showing/explaining formulae
- If necessary prepare extra slides to reply to questions on aspects of the paper you don't have time to explain
- Assume the audience is an expert. Focus on the interesting parts.
- If the chosen paper does not feel right, pick & ask for a different one



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