

EE6380/AI2100/AI5100: Deep Learning, Fall 2023

Indian Institute of Technology Hyderabad
Course Project Flier

Guidelines and Instructions:

- Each team can have *no fewer than three students and no more than four students*.
- Scores on all the project components will be awarded team-wise, i.e., the team's score will apply to all the team members.
- Team formation deadline: 06.09.2023
- Preliminary report - 29.09.2023: This report should include a clearly identified problem statement, and a summary of the related literature reviewed. The report will follow the standard IEEE CVF Conference template. This template can be downloaded from here. This report carries 5% of the total grade.
- Mid-term report - 20.10.2023: This report should include a summary of any further literature review, results replicated from the literature, and preliminary results from your work. Any code developed/experimented with must be submitted. This report carries 5% of the total grade.
- Final report - 24.11.2023: This report should build on the previous reports and present your algorithm, results and conclusions. Your code must be submitted along with this report. This report + results + code carries 15% of the total grade. The work done by each team member must be clearly delineated and the code written by each team member must be appropriately commented.
- Project presentation and viva - TBD: The team must present their work and answer questions. The exact schedule for this will be shared closer to the presentation date. The presentation and viva will account for 5% of the grade.

A non-exhaustive list of topics:

- You are welcome to choose any topic that has either been discussed in class or that is in the tentative topical outline.
- You are also welcome to choose from current trends in the general deep learning space. This includes topics such as generative AI, explainability, self-supervised learning, continual learning, adversarial attacks, and so on
- Natural language processing applications such as language translation, question answering, generation, information extraction and retrieval, and so on
- Speech applications such as perception, recognition, low-resource translation, keyword spotting, identification, and so on
- Computer vision applications in autonomous navigation, surveillance, robotics, aerial vehicles, and so on