16-824 Visual Learning and Recognition (F23)

Instructor: Jun-Yan Zhu

TAs: Zhipeng Bao, Wen-Hsuan Chu, Yeojin Jung, Rutika Moharir

Project Instructions

Project Scope

We encourage all kinds of interesting projects that are in some way related to visual learning. The project is not just restricted to computer vision; you are welcome to introduce other modalities such as NLP, audio, etc. However, all projects must contain some specific computer vision part (not just general learning / deep learning). We do not expect results to beat the state of the art. However, we will be looking into your reasoning for why things did or did not work. The project's goal is to explore some crazy ideas and share your findings with everyone. If you are not sure about whether a particular topic is a good fit or not, feel free to contact instructors and TAs before you submit the proposal.

Project Size

The size of each group is limited to 3-4 students. Please use this spreadsheet to find a team if you need one. Please delete your entry from the sheet once you have formed a team. This will be a good opportunity to practice your teamwork skills!

Project Grading

The project will not be solely evaluated by the outcome or direct results of your proposed methods. We encourage you to compete with state of the art, but it is not the only criterion we are looking at. We strongly consider innovative and interesting ideas (e.g., innovative model architecture, optimization, or even just applying existing techniques to a novel problem space). This is your chance to try something new without having to worry about failure.

Project Proposal (Deadline: October 13, 2023 11:59pm ET)

Each group must submit a proposal. The proposal is limited to two page *including* the references. The proposal should include Problem Setup / Motivation, a high-level overview of relevant literature, your proposed method, and the future implications of your work. We highly encourage teams to include diagrams or illustrations in their proposal and final reports. For the

proposal, this could be as simple as a diagram showing the inputs and desired output. The diagram does not need to be polished; hand-drawn figures are also welcome. Providing a timeline of the project is also encouraged but optional. There is no specific template required for the proposal, but CVPR template is recommended.

Project Proposal Grading

The project proposal will not be graded (however you must submit a proposal). Instructors and TAs will review the proposals and provide constructive feedback regarding their scope, difficulty, and suggest related literature and datasets.

Submission Instructions

- 1. Each group must submit the project proposal to Gradescope by 10/13/23 11:59pm. Only one person in the group needs to submit the proposal.
- 2. Please include all team members' full names and andrew IDs at the top of the proposal.
- 3. **NO LATE DAY** can be used for the proposal submission.
- 4. Start early and have fun!