

Course Project

Code of Honor. All external resources used in the project, including research papers, open-source repositories, datasets, and any content or code generated using AI tools, e.g., ChatGPT, GitHub Copilot, Claude, Gemini, must be *clearly cited* in the final submission. The final report must also include *a clear breakdown of individual group member contributions*. Any lack of transparency in the use of external resources or in reporting group contributions will be considered academic dishonesty and will significantly impact the final evaluation.

Topic	Topic
Category	Open-ended
Supervisor	Amirhosein Rostami

OBJECTIVE Here goes the objective.

MOTIVATION Here goes the motivation.

REQUIREMENTS The final submission should address the following requirements while the details can be freely decided by the group members.

1. Item 1
2. Item 2

MILESTONES The following milestones are to be accomplished through semester.

1. Milestone 1

SUBMISSION GUIDELINES The main body of work is submitted through Git. In addition, each group submits a final paper and gives a presentation. In this respect, please follow these steps.

- Each group must maintain a Git repository, e.g., GitHub or GitLab, for the project. By the time of final submission, the repository should have
 - Well-documented codebase
 - Clear README.md with setup and usage instructions
 - A requirements.txt file listing all required packages or an environment.yaml file with a reproducible environment setup
 - Demo script or notebook showing sample input-output
 - *If applicable*, a /doc folder with extended documentation
- A final report (maximum 5 pages) must be submitted in a PDF format. The report should be written in the provided formal style, including an abstract, introduction, method, experiments, results, and conclusion.
Important: Submissions that do not use template are considered *incomplete*.

- A 5-minute presentation (maximum 5 slides including the title slide) is given on the internal seminar on Week 14, i.e., Aug 4 to Aug 8, by the group. For presentation, any template can be used.

FINAL NOTES While planning for the milestones please consider the following points.

1. You are encouraged to explore innovative approaches to conditioning or generation as long as the core objectives are met.
2. While computational resources are limited, carefully chosen datasets and training setups can make even diffusion models feasible. Trade-offs, e.g., resolution, training steps, are expected and should be justified.
3. Teams are expected to manage their computing needs and are advised to perform early tests to estimate runtime and training feasibility. As graduate students, team members can use facilities provided by the university, e.g., ECE Facility. Teams are expected to inform themselves about the limitations of the available computing resources and design the model accordingly.

REFERENCES