Course Project Instructions

Mobile Robotics

Monsoon 2026

1 General Instructions

Please read the instructions below carefully and adhere to them for the entire duration of the project.

1. The project must be completed in teams of 2–3 members.
2. You are strongly encouraged to consult your team's TA mentor for project-related questions and guidance.
3. You may use AI tools and other online resources for implementation and coding. However, you may not use AI to generate the content of any report. You may use AI only to paraphrase or polish text that you have written yourself.
4. All page limits specified below are strict. Unless explicitly stated otherwise, references do not count toward the page limit.
5. All reports must be prepared in LaTeX using the following document configuration:

```
\documentclass[11pt, a4paper]{article}
\usepackage[a4paper, margin=2.0cm]{geometry}
```

2 Timeline Document

Deadline 2.1 (Timeline Document). 4th October 2026

The document should begin with an abstract of less than half a page outlining the project idea. The abstract should serve as a pitch for the project, neither too brief nor overly complicated.

This should be followed by a more detailed description, within 5 pages (excluding references), covering the motivation, related work (limited strictly to the most relevant works), proposed methodology, datasets, evaluation plan, and timeline. You **must** include sections describing the motivation behind your chosen problem and the contributions your project will make; these sections count toward the page limit. For clarity, the motivation refers to the shortcomings of existing work that point toward your chosen direction, and the contributions explain how your project addresses those shortcomings. Grading will be based solely on the write-up.

The Timeline Document should be submitted with the filename `<TeamNameWithNoSpaces>-Timeline.pdf`.

3 Mid Submission

Deadline 3.1 (Mid Submission). 26th October 2026

The mid submission document may be at most 6 pages long (excluding references), with an optional additional page for appendices. It should include a formal, refined problem statement, a summary of the progress made so far, and a concrete timeline for the remainder of the project. It should also include a comprehensive literature review that demonstrates the viability of and motivation for the project.

If you have used Hugging Face or WandB to train and upload models, include links to the relevant projects in the repository's `README`.

In addition, the remote repository and any Google Drive video links for your project must either be made public or be shared with your TA mentors. Grading will be based on the write-up, the code, and a viva. Slides for the viva are optional.

The Mid Submission should be submitted with the filename `<TeamNameWithNoSpaces>-Mid.zip`.

4 Final Submission

Deadline 4.1 (Final Submission). 23rd November 2026

The final document may be at most 8 pages long (excluding references), with up to two optional additional pages for appendices. It should be a complete write-up of your project, structured like a research paper. All claims must be supported by either prior work or empirical results, along with sufficient analysis, and every research claim should be made as watertight as possible. You may also discuss challenges, limitations, and potential future work; these will not count toward the page limit, provided they appear in a separate section immediately before the references. This section must contain only such discussion and no results from your project, as any results placed there will be treated as future work or limitations.

If you have used Hugging Face or WandB to train and upload models, include links to the relevant projects in the repository's `README`.

Grading will be based on all aspects of the submission: the write-up, the code (included as a ZIP archive in the submission), and the final viva, which will require a presentation (preferably included as a PDF in the submission).

The Final Submission should be submitted with the filename `<TeamNameWithNoSpaces>-Final.pdf`.