

نام مدل: ChatGPT-5

تاریخ استفاده: ۲۹ آبان

Prompt #1:

so i have this computer vision course this semester which has a project which is a paper that i have to implement. any way, the project has 3 milestones and now i have to write the report on the first mile stone. here is what is going to happen. i am going to tell you what have i done and i want you to help me write the report. the things i have done are going to be layed out in the next couple of prompts so don't get fast into the report. are you ready?

LLM response:

Absolutely – I'm ready.

Go ahead and describe everything you've done for milestone 1, step by step. I'll wait for your prompts and won't start writing the report until you say so.

Prompt #2:

ok, so basically for the first milestone, we have read the paper carefully and went through each section studying the new concepts introduced. we have had some trouble understanding some parts of the paper like its network architecture and loss function. so we had to get some help from chatGPT and other llms. however these LLMs could not provide much valueable information, so we had a meeting with the professor of the course to ask our questions about the paper and clarify some vague concepts which happened to be quite helpful. during this

process, we also tried to contact the author of the paper via his email for any additional resources like presentations of the paper or maybe the code implementation of the paper, however we haven't had any responses from the author yet. Speaking of code, we haven't found any code that directly addresses this paper, however there is a repository on GitHub which uses a very similar architecture to the one introduced in this paper. So what do you think so far? I want to go into details of each of the things I have said. Would you like to know any thing else before going forward?

LLM response:

This is a great start – you've described the overall workflow of your milestone clearly. Before you go into the detailed breakdown, here are a few things that would be helpful to know so the final report is complete, structured, and academically appropriate:

Things that would be useful to clarify before writing the report

Paper details

The full title and year of the paper.

Any baseline methods the paper compares to (if relevant for the milestone).

Your interpretation work

Which sections or concepts were the most confusing (e.g., residual block structure? stereo supervision method? loss formulation? dataset preprocessing?).

Any diagrams, summaries, or notes you personally created during reading.

Meeting with the professor

What specific questions you asked.

What clarifications or insights the professor gave.

How those clarifications changed your understanding.

Attempt to contact the authors

When you emailed them.

What exactly you requested (additional resources? training code? architecture description?).

Related GitHub repository

The name/link of the repository (just the name – you don't need to paste the URL).

In what ways the architecture is similar (e.g., encoder-decoder? ResNet backbone? Ordinal regression loss? WebStereo supervision?).

- Whether you studied the code or just identified the repo.

Expectations of Milestone 1

- Did your instructor define the milestone as “paper reading + understanding,” or were you also supposed to experiment with datasets or baseline implementations?

Teamwork (if applicable)

- Are you working alone or with partners? Did you split the reading/work?

Prompt #3:

good points. let me go through them one by one: the name of the paper is Monocular Relative Depth Perception with Web Stereo Data Supervision. well there were two main parts of the paper that where unclear. first, the architecture of the network was not fully explained. the only refernce we had for the architecture was a diagram which included some residual blocks and feature fusion sections that lacked any details of how they were actually implemented. the paper mentions it uses resnet as its backbone but does not provide any further details on how. another part that was place if question was the loss function. its mathematics were unclear and it just popped out of nowhere. it was

hard to understand what it actually does and how we should approach it. so about these two matters, we decided to set a meeting with the professor, after we failed to find out any results by our selves. this meeting really help us understand the network of the paper and how we should implement it in general. we also tried to contact the author and asked for any code, presentation, talks or any other resource related to this paper, but haven't had heard from him yet. after a little search, i found MiDas repo: <https://github.com/isl-org/MiDaS> when i read this repo i realized how similiar its architecture is to the paper. even though it does not directly mention this paper. this repo is going to come handy once we actually start implemnting the paper. in the end, the Expectations for milestone 1 is to read the paper, understand the total workflow and identify the chanllenges we are going to face and to get fimiliar with the concepts introduced in the paper. btw, we have also downloaded the dataset of the paper and look it up to see how it is. i have 2 other teammates which i have done the above wuth them

LLM response:

Milestone 1 Summary (for confirmation)

Paper

- *Monocular Relative Depth Perception with Web Stereo Data Supervision.*

Tasks Completed

- Carefully read and analyzed the entire paper.

- Identified unclear sections:
 - (1) The architecture (unclear residual blocks, fusion modules, ResNet backbone usage).
 - (2) The loss function (mathematically unclear and insufficiently explained).

Challenges & Attempts

- Sought clarification using ChatGPT/LLMs – limited useful information found.
- Scheduled and attended a meeting with the course professor, which clarified the network design and how to interpret/implement the paper's architecture and loss.
- Contacted the paper's author via email to request additional resources (presentations, talks, code). No response received yet.

External Resources Explored

- Found the **MiDaS** GitHub repository, which uses an architecture very similar to the one described in the paper (encoder–decoder structure, ResNet backbone, depth regression framework).
- Expect MiDaS repo to be very helpful during implementation even though it doesn't directly reference the paper.

Dataset Work

- Located and downloaded the dataset used by the paper.
- Explored its structure to understand how the data will be used in training.

Milestone Requirements

- Understand the paper's workflow and methodology.
- Identify conceptual and technical challenges ahead.
- Become familiar with the concepts introduced in the paper.

Team Details

- You are working in a team of **three**.
 - All the above steps were completed collaboratively.
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If this summary looks accurate, I'll proceed to write the full milestone report in a clear academic style with sections like:

- Introduction

- Paper Overview
- Understanding the Architecture
- Understanding the Loss Function
- Challenges Encountered
- External Guidance and Meetings
- Related Work (MiDaS)
- Dataset Exploration
- Outcome of Milestone 1
- Next Steps for Milestone 2