

Computer Vision Course Project

Guidelines, Proposal Instructions, and Best Practices for a
Successful Project

Team Structure

Standard Team

Maximum of 2 students per team is allowed to ensure focused collaboration.

Exceptions

Teams of 3 require a detailed and valid justification in the proposal form.

Project Constraints

- ☑ **Avoid High Computation:** No extra GPU resources are provided.
- ☑ **Hardware Access:** Ensure you have personal access to necessary hardware.
- ☑ **Feasibility:** Choose models that run on standard machines.
- ☑ **Optimization:** Focus on efficient algorithms over massive models.

Choosing a Topic



Compute First

Select topics fitting your available computing power.



Avoid Trendy

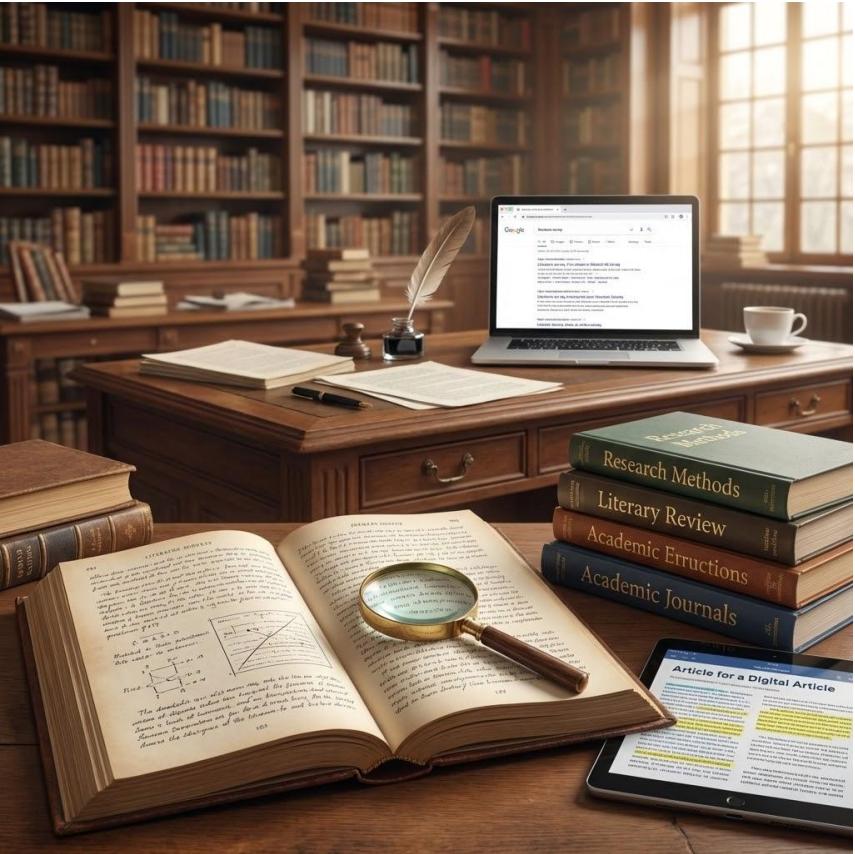
Skip overcrowded topics; find a specific niche problem.



Paper Potential

Aim for promising problems suitable for publication.

Literature Survey



- ✔ **Foundation:** Thorough survey is crucial for a strong project.
- ✔ **AI Tools:** Leverage AI tools to accelerate paper discovery.
- ✔ **Quality:** Select recent papers from top-tier venues.
- ✔ **Code Availability:** Prioritize papers that have released their code.

The Value-Add

Identify Gaps

Find shortcomings or limitations in the existing work.

Propose Fixes

Brainstorm methods to alleviate identified drawbacks.

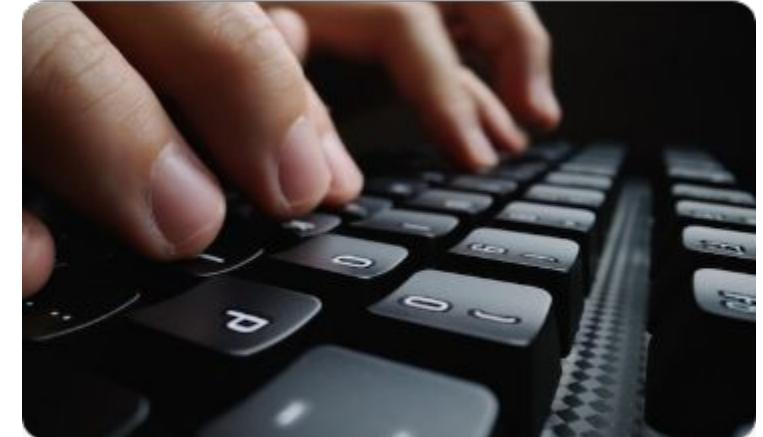
New Context

Apply the existing idea to a non-trivial domain.

Verify Idea

Run your concept by TAs to ensure non-triviality.

Coding & Implementation



Use AI Agents

Utilize Copilot and agents for faster coding.

Implement SOTA

Implement SOTA papers to truly understand mechanics.

Hands-on Check

Verify paper claims by testing code yourself.

Integrity Policy

0%

Zero Tolerance

Ensure absolute originality of your proposal.

Significant similarity leads to poor grades.

Support & Guidance

Consult TAs early for topic verification.

Use office hours to discuss feasibility or Drop a message in GChat.

Seek Professor/TA advice if required.

Collaborate to polish final work for publication.

Get Your Hands Dirty

Experiment. Build. Discover the full picture.



Questions?

Discuss doubts with the Professor or TAs.

Submission Deadline: Feb 1st, 2026