Second Assignment

Literature Review in Computer Vision

17 April, 2025

Goal:

In this assessment, you are required to submit a literature review report as a team. Please ensure you read the entire document before you begin your literature review report.

Please follow the University guidelines on collaboration and plagiarism, which are available from the Univeristy's website. We will use software to check the overlapping (将用查重软件来查重复率，正文（除去参考文献）的重复率要低于 10%).

The mark for this assessment is calculated from 40% of final mark of this course.

SECTION A (Individual Contribution)

In the cover letter, each group member needs to clearly declare the individual contributions to this literature review report by using the following table:

Individual Contribution Declaration (pls tick if you contribute)				
Student Name				
Student ID				
Search literature				
Evaluate, Select Literature				
Identify Research Trend, Gaps, Debates, etc.				
Survey Structure				
Writing				
Other Contributions (pls state):				
Other Contributions (pls state):				

SECTION B (Topic and Writing)

In the literature review, you can freely choose any topic （可以自由选择任何计算机视觉领域的题目） that you prefer as long as it sits in Computer Vision (https://baike.baidu.com/item/%E8%AE%A1%E7%AE%97%E6%9C%BA%E8%A7%86%E8%A7%89/2803351).

Along with this document, a list of suitable topics is also released. So you can also choose your topic from those Specific Topics in this list（你也可以选择我推荐的一些参考的文献综述选题）.

Your literature review must be well structured and written in good English or Chinese (中文或英文都可以). Please pay attention to the following:

- Spelling, punctuation and grammar

- Make sure to define acronyms

Before your writing, please read 【如何去写一篇文献综述】
https://www.bilibili.com/video/BV1SB4y197kG/?share_source=copy_web&vd_source=c24d6d5dd47549fe471151402ce50c28

SECTION C (Length)

Your submission must comprise two parts, as follows:

- A separate cover letter: states names and student IDs of the group members, a clarification table indicating individual contributions, and a signed declaration stating: We certify that all material in this report which is not our own work has been identified.

- The literature review report: can be between 10 pages and 15 pages excluding references. So the minimum length of your report is 10 pages and maximum length is 15 pages excluding references. Generally, you may need to survey at least 40-70 references to produce a good review on a specific topic.

Please compile the two parts into a single PDF for the final submission.

SECTION D (Format)

The literature review report must be in PDF and use ACM Conference Proceedings Primary Article Template, an example can be found here:

https://www.acm.org/binaries/content/assets/publications/word_style/interim-template-style/interim-layout.pdf

If you are a Latex user, you can find the format here:
https://www.overleaf.com/gallery/tagged/acm-official#.WOuOk2e1taQ

If you are a Word user, you can find the format here:
https://www.acm.org/binaries/content/assets/publications/word_style/interim-template-style/interim-layout.docx

The sources of literature you can use may include books, journals, conference papers, reports etc. You are advised to avoid using web pages as primary literature sources because they are not peer reviewed, and their contents and even the links to some pages may change frequently. All cited material will need to be referenced in a correct and consistent style, with the references collected together in bibliography at the end of the document. The citation format can be seen from https://www.acm.org/publications/authors/reference-formatting

SECTION E (Section Requirement)

In your literature review report, you need to at least include the following sections:

- Abstract: Brief summary of the contents of the article

- Introduction: An explanation of the purpose of the literature review; a statement of the research problem(s) you intend to survey; briefly explain how you select the relevant literature and why your survey is needed or important, and how your survey is different to or better than existing ones; etc.

- Description of Research Problem(s): Describe, formulate or explain the research problem(s) that the literature review report concentrates on

- Literature Survey: The main body of your literature review report; A critical assessment of the work done so far on this topic, to show how those study relates to each other; identify the trends or patterns of the techniques to solve the research problem; etc.

- Discussion and Future Direction(s): What is your comments or feedback or insights after you surveyed the related works; point out existing or unsolved research gaps, challenges or open questions; and discuss possible future directions on this topic; etc.

• Conclusion: State the conclusions and implications of your literature review results; summarize your literature review precisely; provide some take-away message for readers or researchers who are interested in this topic; etc.

• Reference

You can add more sections where you see necessary in your literature besides those as required above.

In Sec. Description of Research Problem(s), you can use subsections if your literature review report involves with multiple research problems.

In Sec. Literature Survey, Sec. Discussion and Future Direction(s) and Sec. Conclusion, you can also use subsections where appropriately.

SECTION F (Marking Criteria)

• *INTRODUCTION (10%): The topic area has been clearly defined and motivated with reference to relevant materials*

• *BREADTH AND DEPTH OF REVIEW (20%): An appropriate number of sources has been reviewed, in sufficient depth.*

• *CRITICAL ANALYSIS AND SYNTHESIS (20%): Whether the report demonstrates a good overall understanding of the topic has been demonstrated, using ideas brought together from different sources.*

• *DISCUSSION AND FUTURE DIRECTIONS (10%): Whether the report demonstrates the students have their own insights about the research topic and showed an appropriate understanding of the relevant literature and future directions*

• *SUMMARY AND CONCLUSION (10%): Whether there is a good overall summary to the whole document, with conclusions to take forward*

• *REFERENCES (10%): References are correctly and consistently cited in an approved style, with all external material explicitly and unambiguously acknowledged.*

• *PRESENTATION (20%): The document is well-structured and attractively produced, written in good English, with few or no typographical, spelling, or grammatical errors.*

Submission

- Deadline: **10 PM, 22 May, 2025**
- Submit on
  https://www.bb.ustc.edu.cn/webapps/assignment/uploadAssignment?content_id=_162059_1&course_id=_28457_1 , Pls submit a report (in **.pdf** format), please name your files in the format of: "Group_组号" (e.g., Group_01.pdf)
- **Every student should submit a pdf, although the students from the same group can submit the same document.**