**UFMFRR-15-M Machine Vision**

**Tutorial Three: Literature Review**

1. Please review the content delivered in the first two weeks and make sure you comprehend the basics of Python and image operations by completing all the exercises from week 1 and week 2. Please also double-check the group formation on Blackboard and join a group if you have not already.

2. To facilitate the progress of your group assignment, make a start by reviewing the relevant literature during this tutorial. You are suggested to divide your team into two subgroups. One subgroup should conduct a review of conventional image processing methods (in other words, non-machine-learning-based methods, non-data-driven methods). The other subgroup would focus on reviewing machine learning based methods in the given topic.

Here are some tips for you to start the literature review:

1) Before the literature review, clearly define the topic or question you are investigating with your assumptions. Make sure it is specific, focused, and aligned with the assessment brief.

2) Develop a list of keywords and phrases related to the assessment topic to help you search a broad range of literature, such as fruit counting, small object detection, and machine vision in precision agriculture.

3) Use the library literature database wisely. You can use your university account to log in to many databases like Google Scholar, PubMed, IEEE Xplore, Scopus, or Web of Science to find scholarly articles, book chapters, and conference papers.

4) When reviewing the literature, you should start by skimming the abstract to determine the relevance of the references and make sure each reference directly addresses your research question.

5) Then, you should read the relevant articles thoroughly and use the following table to organise your findings from the literature.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Research topics | Methodologies proposed | Main contributions | Limitations and gaps |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| … |  |  |  |  |

6) The above steps would be helpful for writing up your literature review. You need to organise the references thematically or chronologically using citation management tools, such as Zotero, Mendeley, or EndNote, if you would like to. When writing the report, critically summarise the key insights from the literature, highlighting major contributions and research gaps, and explain how your project will address these gaps or extend current understanding. Please also ensure you reference all sources used, using the [UWE Harvard](https://www.uwe.ac.uk/study/study-support/study-skills/referencing/uwe-bristol-harvard) system and the guidance available on [UWE’s Study Skills referencing pages](https://www.uwe.ac.uk/study/study-support/study-skills/referencing).