

AI & Robotics Seminar

Literature Review Assignment

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Please prepare notes on the following tasks on a (~1 page) pdf that you can share via zoom in our session. Be able to explain how you found/collected your data.

1 Basic literature search on the topic of *FlowBot3D*

Use Google Scholar for the following tasks:

- a) Find the “classical” literature on the topic of extracting kinematic models from perception – use keywords such as *articulated objects*, *learning kinematic models (from perception)*, and *interactive perception*. Classical here means the oldest papers that introduced such terms and the problem setting. Identify 2 or 3 classical papers and briefly describe what they actually did.
- b) Start from these classical papers and check what are recent papers (e.g. from the last 10 years) that cite these classical papers (see “Cited by” on Google Scholar) and which are most cited themselves or seem particularly interesting. Ignore pure survey/review papers. These should reflect the state-of-the-art on the topic. Identify 2 or 3 of such recent papers and briefly describe what they actually did. Which words do they use to define the problem.
- c) Go back to the FlowBot3D paper and check what they cited as the classical and recent papers on the problem. Do they discuss the papers you found in (i) and (ii)?

Here are the basic tools:

- *Google Scholar* became a standard tool to search for literature as well as researchers. When searching for a topic or researcher, the listed papers shows which other papers cite this paper “*Cited by ...*”. The citation number itself is indicative of impact. And going through the list of citing papers you can **search forward** in time, finding more recent papers on the topic.
Searching backward in time is harder: You have to look into the paper, and scan esp. the Introduction and Related Work section to find early works on the topic.
- arxiv.org and ResearchGate and most recently even twitter are alternative ways to search for literature – but I find it harder to search forward/backward or judge impact using these tools.