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| Module Name | Objective | Inference |
| Opencv-python   |  |  |  | | --- | --- | --- | | KCF and CSRT trackers | To track targeted object in the video with bounding boxes | Better results than other trackers but can’t handle full occlusion. | |  | | | | Multitracker | To track more than one object in the video(using KCF,CSRT tracking algorithm) | Satisfactory result, but as the number of objects to be tracked increases FPS drops down. | |  | | | | 2D patches generation | Storing what’s inside the bounding box as image image for each frame | The patches always contained background, Segmentation Masking can be used to obtain objects without background. | | | |
| OpenSFM | For generating 3d point cloud data by 2D patches  For information about rotation about objects and changes in camera angle | For simple objects it worked upto some extent.For complex,transparent,shiny objects too much noisy data. |
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| OpenMVS | For generating dense point cloud data.  For generating mesh and texturing | Couldn’t use it, some C++ scripts required dependencies not supported by our pc. |
| Open3d-python-api(instead of OpenMVS) | For generating triangular 3d mesh from point cloud data | Poisson surface reconstruction worked well for non-noisy point clouds. |
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| Pyrender | For animating the 3D mesh | 3D Viewing of the object as well as replication of the camera motion around the object |