

ASSIGNMENT- ML Intern

- The process of estimating the parameters of a camera is called camera calibration. This means we have all the information (parameters or coefficients) about the camera required to determine an accurate relationship between a 3D point in the real world and its corresponding 2D projection (pixel) in the image captured by that calibrated camera.

Write a python script to automatically find the camera calibration parameters using a 6x8 checkerboard pattern.

Record a video to show how the setup works.

You can find the checkerboard pattern here:

<https://raw.githubusercontent.com/MarkHedleyJones/markhedleyjones.github.io/master/media/calibration-checkerboard-collection/Checkerboard-A4-30mm-8x6.pdf>

- Explain the mathematical basis of how the checkerboard pattern helps in this calibration. Are there some alternate means by which a camera can be calibrated?
- Write a code for singly linked list which stores data of type int (using struct). It should contain functions :
 - Adding a new node,
 - Deleting a particular node (referenced by the location),
 - Delete all the nodes from the list which contain a particular data say a number 5
 - Delete the complete linked list
 - Display the linked list
 - Display the inverted linked list
 - Display the total memory space occupied by the linked list
 - Delete all the nodes from the list which contain a particular data say a number 5 and the next subsequent node