



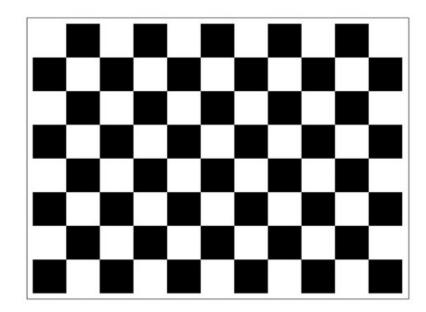
Assignment 9

Sung Soo Hwang





- Get the camera parameters using the chessboard below.
 - You can use the code in the PPT '13_2_Camera_Calibration'





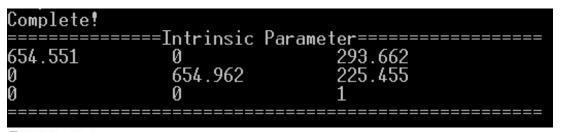


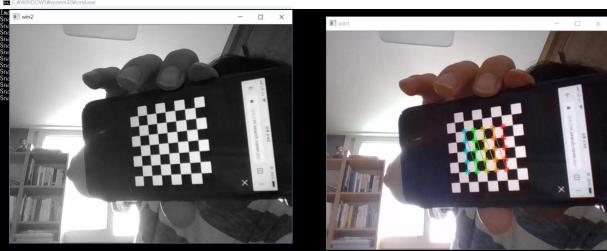






- Results
 - Submit the screen shoot of your Intrinsic Parameter.









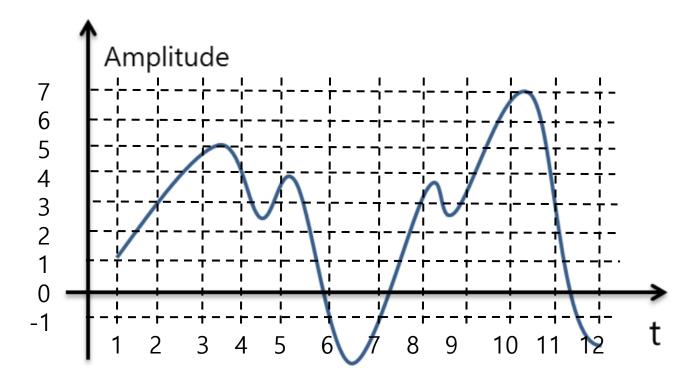
Exercise 11

Sung Soo Hwang





• Perform sampling and quantization on the signal below step by step. Set both sampling period and quantization step as 1. For quantization, we round down the value.







• Assume that we have a camera whose focal length is 5, number of pixels per unit distance in x and y direction is as 200, skew parameter is 0, and the position of principal point in the image plane is (100,100). The camera is located at (0,0,5) in 3D world coordinate, and the principle axis is parallel to z-axis of 3D world coordinate. Show camera projection matrix of this camera. What is the position of the projected point when a 3D point is (10, 20, 10, 1).