Homework 5

Hough Transform

A distance image (in .mat format; captured by PMDTech 3D camera) of several apple trees is available in Angel (200.zip). Each pixel in this image represents the distance from the camera to the object at that location. The image needs a 90 degree rotation to bring the trees to upright position. Use Hough Transform to find linear structures of the apple trees in the two rows adjacent to the camera. You may want to use distance filters to remove noise and unwanted trees from the distance image.

Note: A DSLR image of approximately the same field-of-view is also included in the zip file for your reference.