

# Research Log - Week 16

JeffGWood@mavs.uta.edu

September 2, 2016

---

August 28, 2016      Reworking of original camera grab programming made using **OpenCV** during **CSE 5393**. Previous version required manual trigger. Recoded version displays timer and takes shots at end of countdown. Recoded version also displays reduced resolution camera version for preview purposes, but saves full sized images.

---

September 1, 2016      Brought in test data, and created test point cloud data into **MatLab** using following steps.

1. Calibrate *intrinsic* and *extrinsic* camera parameters from checkerboard images.
2. Using same camera setup, take picture of scene with checkerboard removed.
3. Rectify image using **MatLab** or [Fusiello1999] [1].
4. Computer disparity.
5. Compute depth map.
6. Compute point cloud.

## References

- [1] Andrea Fusiello, Emanuele Trucco, Alessandro Verri, and Ro Verri. A compact algorithm for rectification of stereo pairs, 1999.