

Object Reconstruction with Depth Error Compensation Using Azure Kinect (Appendix)

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A. Additional figures



Figure 1: 3D surface reconstruction of a person (left) and a face (right). The top row are input point clouds, the middle row are reconstructed mesh using Poisson Surface Reconstruction, the bottom row are ones after cropping the redundant parts.



Figure 2: 3D surface reconstruction from point clouds (left column) to reconstructed surfaces (right column) of a guitar, a yellow box and a scene of bedroom.

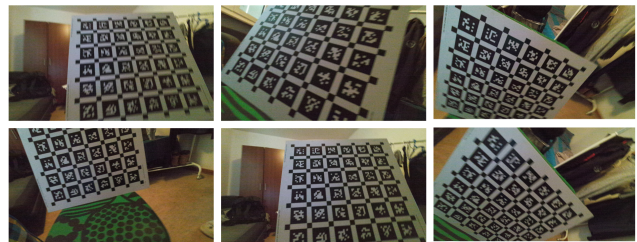


Figure 3: Example training images of Aprilgrid target board.

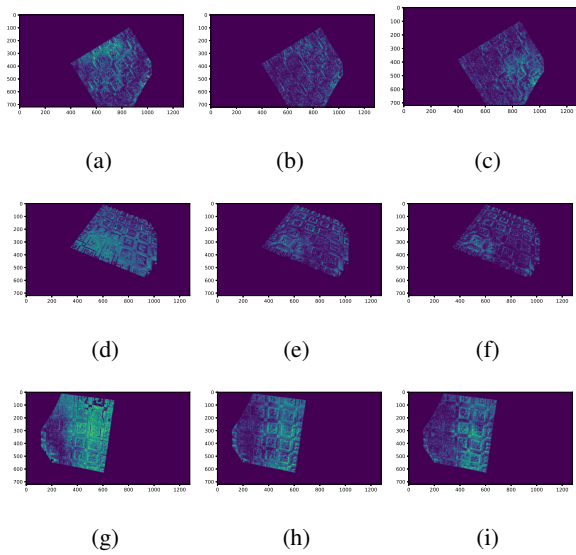


Figure 4: Comparison of absolute error at each pixel among 3 original example images and their corrected images using our learning-based approaches. Brighter area indicates larger depth error. (a)(d)(g): error of the original depth images; (b)(e)(h): error of corrected depth images using neural network model; (c)(f)(i): error of corrected depth images using random forest model.