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Subject: Re: 3D point cloud visualization: filled polygons in the front, different fill colour + lines in the back

Posted by [Nuno Ferreira](#) on Fri, 29 May 2015 09:28:30 GMT

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> This is a very cool use of the visualization capabilities of IDL. Is there an ultimate goal or are you just enjoying the fun of experimentation with new tools?

Yes, there is a goal. We are assessing the use of 3D sensing devices in medical imaging, namely in image fusion and movement analysis/correction. We would like to use the 3D surface information provided by these sensors as an aid to fuse patient data acquired in different scanners. For instance, we would like to provide CT information to a PET-only scanner (CT and PET stand for Computed Tomography and Positron Emission Tomography respectively; most PET scanners nowadays also have CT, but some prototypes and old cameras only have PET). Another possibility is to measure and correct patient movement that may occur during studies performed in PET/CT scanners (since CT and PET data are not acquired simultaneously, some mis-registration of the two types of information may occur if there is movement). There are also other potential applications, such as using the Kinect to help positioning the patient in the scanner if the camera does not have a patient positioning system.

> Thanks for the screen shots!

You're welcome.

> (As of Friday morning I no longer work for Exelis - I now work for Harris.)

Best luck on your new job!

Nuno

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