RGBDToolkit skins DSLR photos onto Kinect depth maps

This is a perfect example of the “new aesthetic”.

By Norman Chan on May 2, 2012 at 9 a.m.

RGBDToolkit is an open source software package that combines the depth camera in Microsoft’s Kinect with the high-resolution video of a DSLR. While the Kinect’s IR camera allows it to accurately detect depth, its RGB camera only captures images and video in paltry 640x480 resolution. The software pairs video from a DSLR attached to the top of a Kinect sensor bar with the Kinect’s depth data to render unique 3D imagery. Alternatively, an Asus Xtion Pro Live can be used instead of the Kinect since it’s smaller and only requires USB power. Some calibration is needed, but the setup can be freely moved around once the data from the two cameras are matched. The resulting video is striking, and calls to mind “The New Aesthetic” that we wrote about last month. The RGBDToolkit was created by Carnegie Mellon Fellows James George, Alexander Porter, and Jonathan Minard.

Here’s a great demo of RGBDToolkit in action from a workshop the toolkit’s developers hosted at Hangar in Barcelona.