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Microsoft Kinect Software - Ready To Use

Getting Started Fast with the Kinect

Getting Started

There are a variety of software that are being or have been developed that provide you with access to the Kinect sensor through interactive GUI's. Some use different API's and libraries (OpenNI, Microsoft SDK, etc.) to do this communication with the Kinect and these may conflict with software that you have already installed. So read the sites before downloading and installing. Make sure that you do clean installs.

In this post we will provide you with a high level introduction to two excellent software suites provided on a free-to-use basis.

Instant Access

These provide instant access to the sensor data and help to get your project started whether it involves scanning, recording, viewing, or streaming from the Kinect.

Follow the links at the end of the pages to see an example workflow with each of the two software packages.

RGB Demo was initially developed by Nicolas Burrus in the RoboticsLab. He then co-founded the Manctl company that now maintains it, helped by various contributors from the opensource community.

Current features

Grab kinect images and visualize / replay them

Support for libfreenect and OpenNI/Nite backends

Extract skeleton data / hand point position (Nite backend)

Integration with OpenCV and PCL

Multiple Kinect support and calibration

Calibrate the camera to get point clouds in metric space (libfreenect)

Export to meshlab/blender using .ply files

Demo of 3D scene reconstruction using a freehand Kinect

Demo of people detection and localization

Demo of gesture recognition and skeleton tracking using Nite

Demo of 3D model estimation of objects lying on a table (based on PCL table top object detector)

Demo of multiple kinect calibration

Linux, MacOSX and Windows support

RGBDemo can be found here: www.labs.manctl.com/rgbdemo/index.php

In my opinion the Brekel Kinect software is the best that I have seen for easily interfacing with the Kinect.

It uses the OpenNI framework, which we show on the GMV here, but the developer of this software also provides their own packaged OpenNI installer that comes with all the required dependencies.

Current Features

The Brekel Kinect only offers binaries for the Windows platform. It was developed by Jasper Brekelmans in his free time.

It allows you to capture 3D objects and to export them to disk for use in 3D packages. It also allows you to do skeleton tracking which can be streamed into Autodesk's MotionBuilder in realtime, or exported as BVH files.

The greatest things about the Brekel software are that it requires no programming expertise, it has an easy to use GUI, and it has the ability to export almost all of the Kinect's capabilities in a variety of formats.

The Brekel website offers a bunch of links to other resources, downloads, tutorials and answers to FAQ's. Check it out at:

Main Site: http://www.brekel.com

You are reading the series: <u>Microsoft Kinect - Getting Started</u> <u>Microsoft Kinect - Hardware</u>

Microsoft Kinect Software - Ready To Use

Microsoft Kinect – An Overview of Programming API's Microsoft Kinect API's – Installing the OpenNI Modules

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