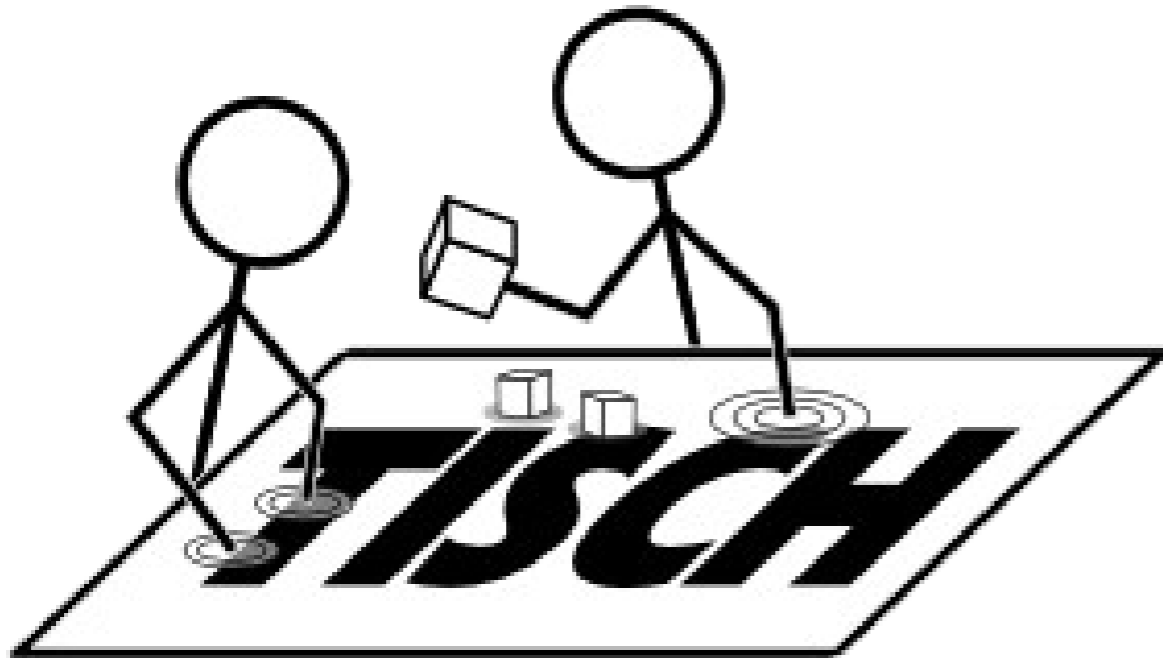


TISCH

Tangible Interactive Surfaces for Collaboration between Humans

Videotutorial 03



- Topics

- libfreenect and required libraries
- libtisch-2.0 with libfreenect on Windows
 - adjust libtisch paths
 - modify libtisch projects
- example application using Kinect

libfreenect: required libraries

- install libfreenect for windows following the official guide:
http://openkinect.org/wiki/Getting_Started#Windows
- additional required libraries:
 - libusb-win32-bin (version 1.2.5.0)
 - pthread (using Pre-build)
 - (glut version 3.7.6, only necessary for libfreenect examples)

adjust paths to integrate libfreenect

- assuming libtisch-2.0 is installed as described in tutorial 02
- provide path to libfreenect to libtisch:
open **libtisch-2.0/scripts/common.props**,
find **<freenect>Insert Path to freenect here</freenect>** and change to
e.g. **<freenect>C:\kinect\libfreenect\include</freenect>**
- important: create a copy of lusb0_usb.h and name it usb.h
- start libtisch_vs2010.sln in Visual Studio

adjust project settings: libsimplecv

- select properties and find **C/C++ > Additional Include Directories**
 - add path to **pthread include** (C:\kinect\pthread\Pre-build.2\include)
 - add path to **libusb include** (C:\kinect\libusb-win32-bin-1.2.5.0\include)
- find **Linker > additional Library Directories**
 - add path to **libusb** (C:\kinect\libusb-win32-bin-1.2.5.0\lib\msvc)
 - add path to **pthread** (C:\kinect\pthread\Pre-build.2\lib)
 - add path to **libfreenect** (C:\kinect\libfreenect\VS2010\lib\Release)

adjust project settings: libgestures

- select properties and find **VC++ Directories > Library Directories**
 - add path to **libusb** (C:\kinect\libusb-win32-bin-1.2.5.0\lib\msvc;)
 - add path to **libfreenect** (C:\kinect\libfreenect\VS2010\lib\Release;)
 - add path to **pthread** (C:\kinect\pthread\Pre-build.2\lib;)

adjust project settings: touchd

- select properties and find **C/C++ > Additional Include Directories**
 - add path to **pthread include** (C:\kinect\pthread\Pre-build.2\include)
- find **C/C++ > Preprocessor**
 - add here „**HAS_FREECT**;“

TISCH VideoTutorial 03 finishing touches

- recompile libtisch
- copy freenect.dll to libtisch-2.0/Release

starting apps using Kinect

- plug-in Kinect
- start touchd.exe -c ../drivers/touchd/sample_kinect.xml -V
- start calibtool.exe (calibrate your working area, see -h for help)
- start calibd.exe
- start application:
 - demo.exe
 - picview.exe Img01 Img02 ...

TISCH VideoTutorial 03 overview

- install libfreenect
- adjust paths to enable Kinect support
- setup Kinect and calibrate workspace
- start application