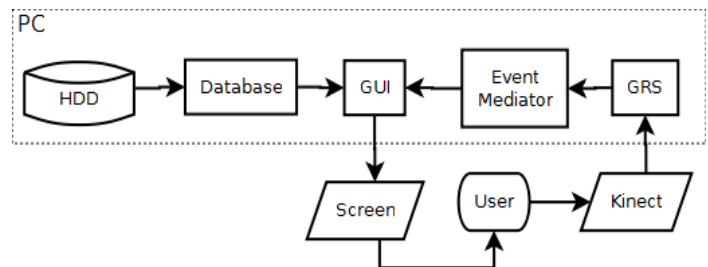# KIM
Kinect Interactive Monitor

Fredrik Johansson - Johan Lindström - Tobias Malm - Anton Nordmark - Mikael Persson
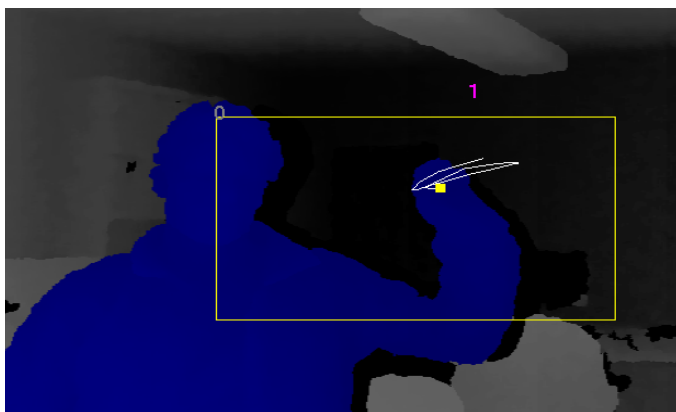
KIM is an interactive video player for open spaces.

Simple intuitive interaction using Microsoft Kinect.

Removes the need of physical control devices.

Idle system plays randomized videos from the video catalogue.

The principal dataflow

Segmentation of depth-map

Video interface

GRS (Gesture Recognition System)

Emulates one button mouse.
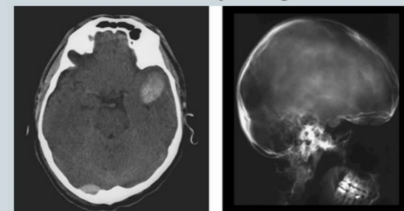
Built using the OpenNI and NITE Kinect interface.

User waves hand to take control.

Sideways movement moves the cursor.

Moving your hand towards the Kinect pushes the button.

User centred coordinate system obtained by head detection.

GUI (Graphical User Interface)

3D virtual space for navigating video catalogue, made in Ogre3D. The 3D scene is overlaid by a 2D HUD.

Video catalogue displayed as icons fixed on stacked cylindrical rings (see fig).

Each ring corresponds to a category.

Icons automatically generated or manually added.

Suggested video category autonomously generated by gathering usage statistics.

Suggested videos include new and popular videos.

Cursor

Category navigation

Category

Movie icon

Overview of the movie navigation