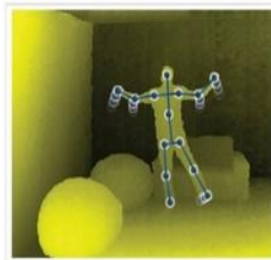
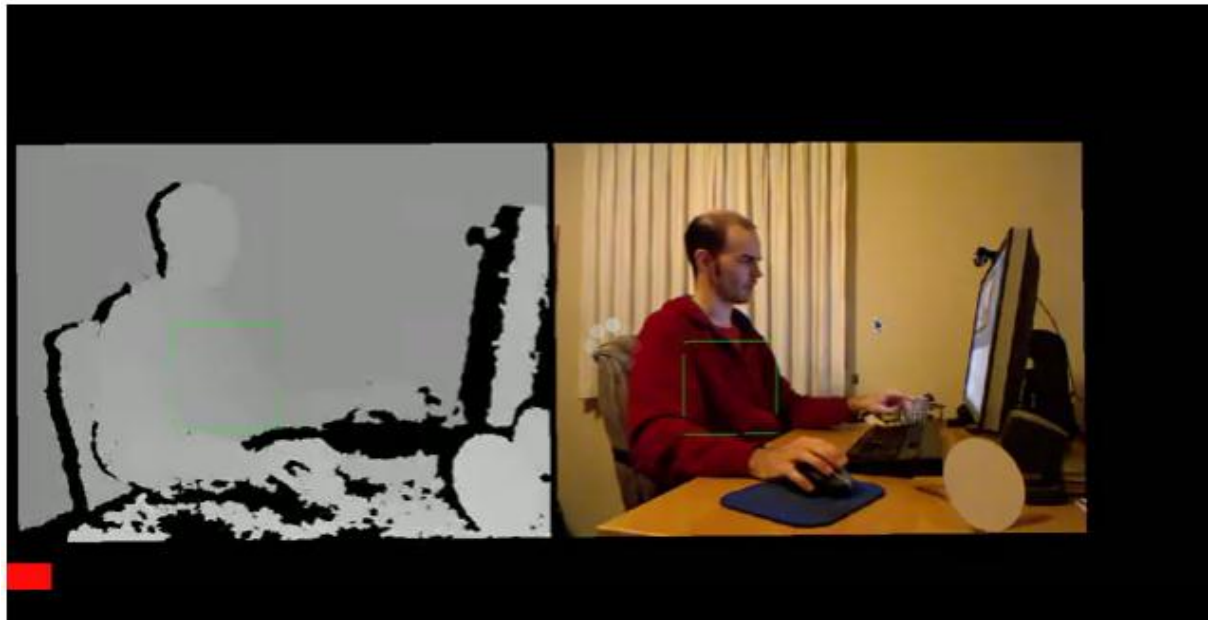


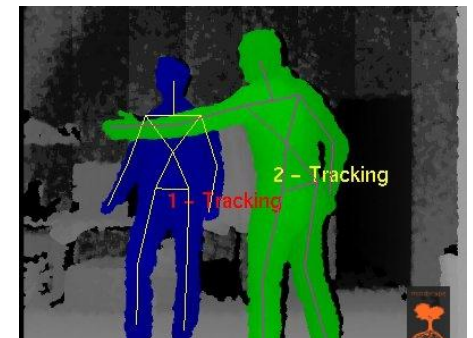
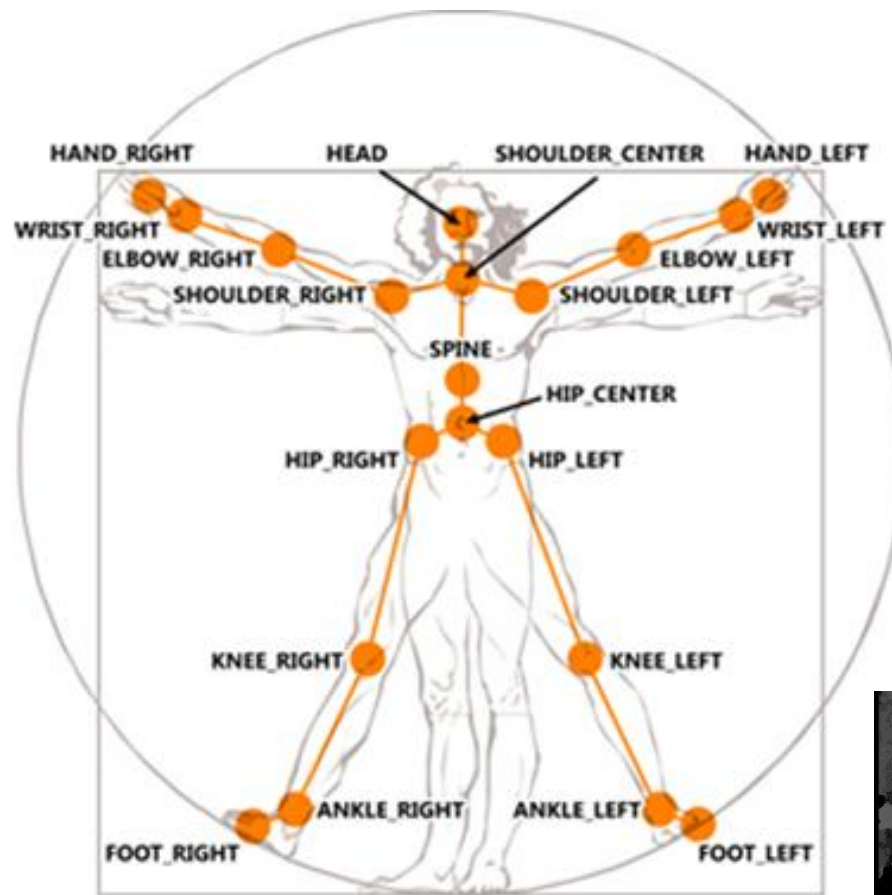
Kinect



3D depth data vs. Color image



Skeleton

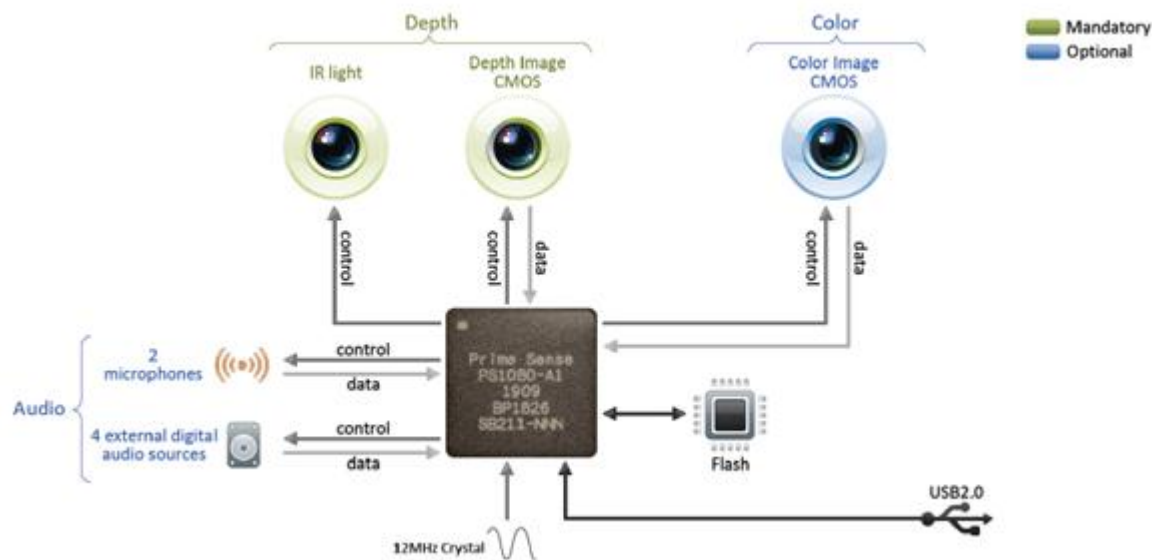


Hogyan működik?

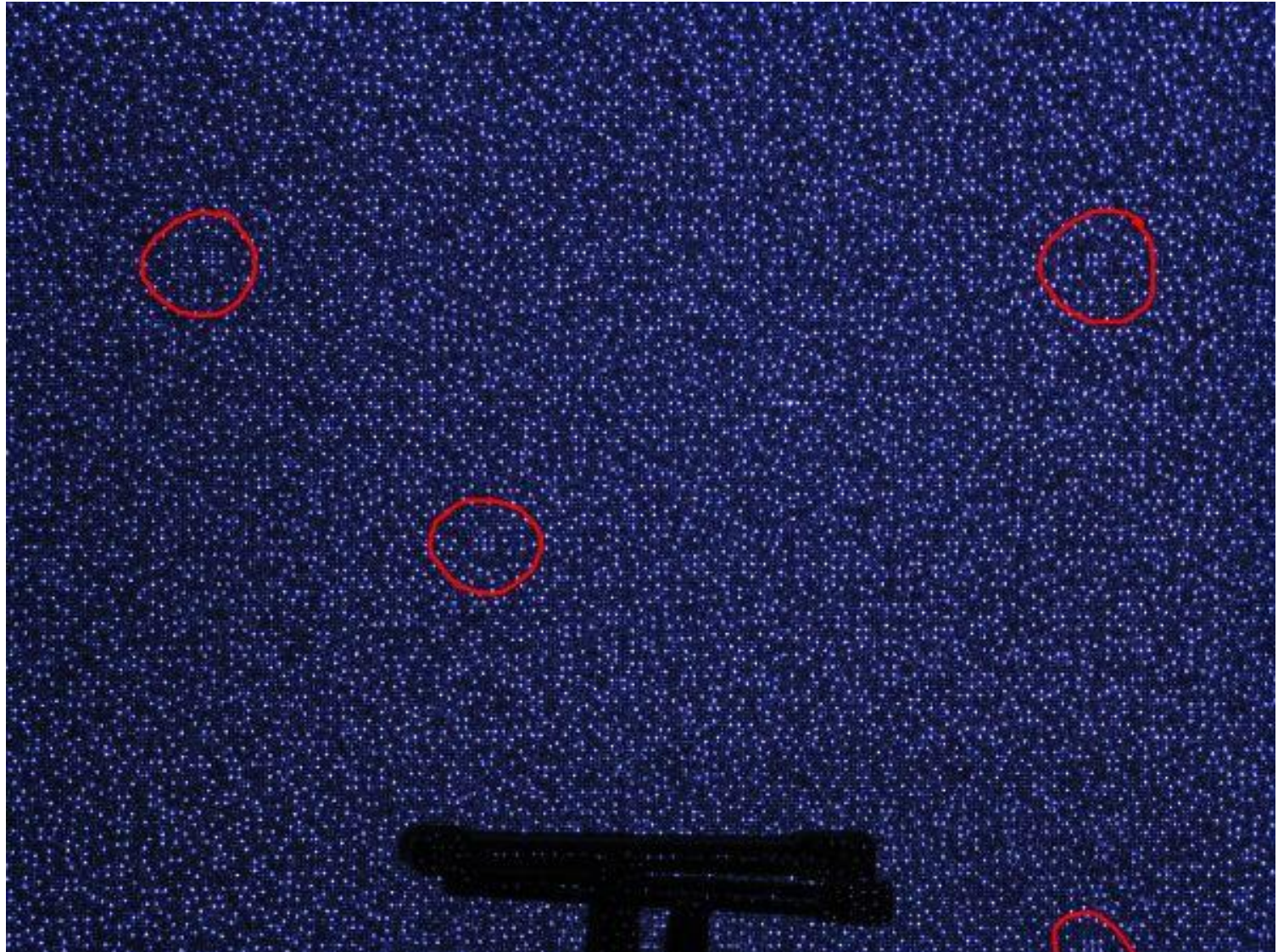


Hogyan működik?

IR fény, IR érzékelő, CMOS kamera



Hogyan működik?



Adatok

Data Streams

- 320×240 16-bit depth @ 30 frames/sec
- 640×480 32-bit colour @ 30 frames/sec
- 16-bit audio @ 16 kHz
- Field of View (Horizontal, Vertical, Diagonal)
58° H, 45° V, 70° D

Érdekes alkalmazások



- **Tedesys (Spanyolország)**

Gesztusokon alapuló operációt segítő rendszer (TedCas)



- **Tiger Place University (USA)**

Idősek elesést megelőző rendszere



- **Royal Berkshire Hospital (UK)**

Rehabilitációs program stroke- on átesett betegeknek



- **Lakeside Center for Austin (USA)**

Autista gyerekek készségfejlesztő rendszere

ROS

- openni_kinect stack: ok
http://www.ros.org/wiki/openni_kinect
- kinect stack: deprecated
- K4W vs K4X
<http://answers.ros.org/question/12876/kinect-for-windows/>



ROS

```
sudo apt-get install ros-electric-openni-kinect
```

```
roslaunch oppeni_launch oppeni.launch
```

```
roslaunch image_view disparity_view image:=/camera/depth/disparity
```

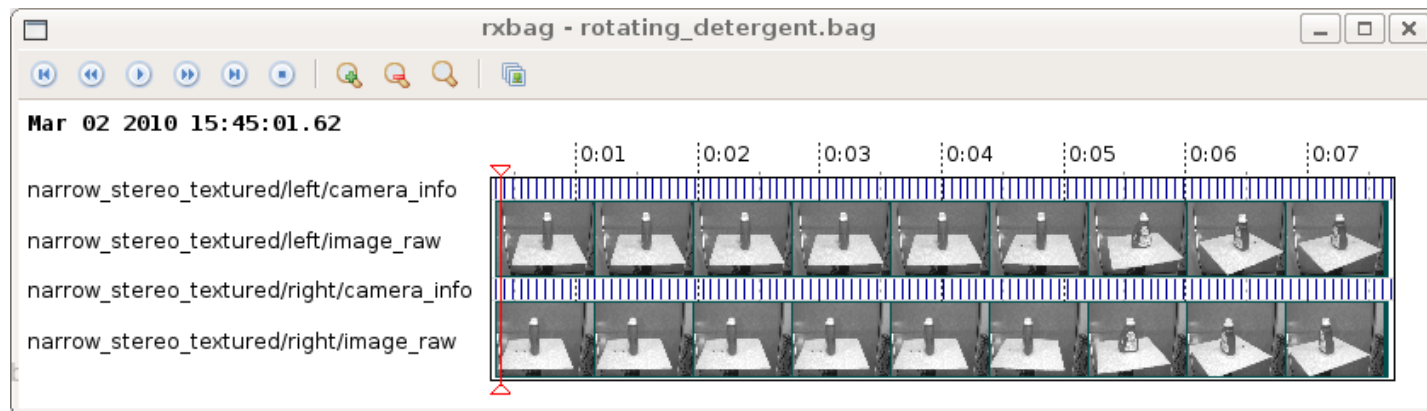
```
roslaunch image_view image_view image:=/camera/rgb/image_color
```

```
roslaunch rviz rviz
```

Megjelenik az rviz >> Add >> Point Cloud >> topic a piros boxba

rosvag

<http://www.ros.org/wiki/rosvag/Commandline>



rosvbag

- Tools for recording from and playing back to ROS topics
- Recording from topics

```
rosvbag record rosout tf cmd_vel
```

- Record all topics

```
rosvbag record -a
```

- Play back contents

```
rosvbag play <my_file.bag>
```

```
rosvbag -h
```