OpenKinect

The OpenKinect Community

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[Test Pattern!]
[Absolute confusion!]
[Sounds of disgust!]
[Yay!]
[Whee!]
[Academic understanding!]
[Pffft!]
What does this solve for us?
Segmentation
Background Subtraction
[Sounds of learning!]
Hand Detection Phase

http://www.vimeo.com/296403
[Ooooooh!]
Day 0
Release
[Gasp!]
bcdUSB 2.00
bDeviceClass 0 (Defined at Interface level)
bDeviceSubClass 0
bDeviceProtocol 0
bMaxPacketSize0 64
idVendor 0x045e Microsoft Corp.
idProduct 0x02ae
bcdDevice 1.0b
iManufacturer 2 Microsoft
iProduct 1 Xbox NUI Camera
iSerial 3 A00366A08793039A
bNumConfigurations 1
Configuration Descriptor:
  bLength 9
  bDescriptorType 2
  wTotalLength 32
  bNumInterfaces 1
  bConfigurationValue 1
  iConfiguration 0
  bmAttributes 0xc0
    Self Powered
  MaxPower 16mA
Interface Descriptor:
  bLength 9
  bDescriptorType 4
  bInterfaceNumber 0
  bAlternateSetting 0
  bNumEndpoints 2
  bInterfaceClass 255 Vendor Specific Class
  bInterfaceSubClass 255 Vendor Specific Subclass
  bInterfaceProtocol 255 Vendor Specific Protocol
  iInterface 0
  Endpoint Descriptor:
    bLength 7
    bDescriptorType 5
    bEndpointAddress 0x81 EP 1 IN
    bmAttributes 1
      Transfer Type Isochronous
      Synch Type None
      Usage Type Data
    wMaxPacketSize 0x0bc0 2x 960 bytes
    bInterval 1
  Endpoint Descriptor:
    bLength 7
    bDescriptorType 5
    bEndpointAddress 0x82 EP 2 IN
    bmAttributes 1
      Transfer Type Isochronous
      Synch Type None
      Usage Type Data

Day 1

MS speaks out
Day 3

Code Laboratories and the Ransom
[Maybe yay?]
[Booooo!]

Day 5
We get dumps
[Sound of Interest!]
Day 6
Damn it, Europe
[Half Yay Half Boo!]
Day 7

The Community Begins
http://www.github.com/openkinect/
Day $\infty$

Oh god the future why won’t it stop
The Kinect Sensor in Mobile Robotics: Initial Experiments

Philipp Robbel
Personal Robots Group
MIT 2010

http://www.youtube.com/watch?v=dRPEns8MS2o
[Sounds of amazement!]
But what do /you/ want to do, Kyle?
[Laughter!]
[Eww!]
[Neat!]
Who’s Got Drivers?

- C
- C++
- Java
- Processing
- OpenFrameworks
- Jitter via OfxSyphon (Jitter external soon)
Thanks to

• The OpenKinect Community
[Lots of Applause!]
Where to Go

• http://www.openkinect.org
• OpenKinect group on google groups (500+ members)
• #openkinect on Freenode
• @openkinect on twitter
[Complete, utter, uncomfortable silence!]