

#### **Eye-Tracking Devices / Tobii 4C**

**Seminar: Interactive Analytics** 

**Peyman Toreini** 

INSTITUTE OF INFORMATION SYSTEMS AND MARKETING (IISM) KARLSRUHE SERVICE RESEARCH INSTITUTE (KSRI)



## **Eye-tracking Studies**



- Four Main Steps:
  - Step 1: Browsing and selecting the eye-tracker
  - Step 2: Connecting to an eye tracker
  - Step 3: Performing a calibration
  - Step 4: Subscribing to data
- Our Goal → Add Step 5: Use this data in real-time to design Intelligent User Interfaces (Attentive User Interface)

### **How Tobii 4C works?**

Karlsruher Institut für Technologie

The main source is Tobii Developer's Guide



**tobii** tech

#### Developer's Guide

Tobii EyeX SDK for .NET

November 19, 2015 Tobii Tech

The Tobii EyeX Software Development Kit (SDK) for .NET contains everything you need for building games and applications using the Tobii EyeX Engine API and the .NET Framework.

We suggest to read it carefully!

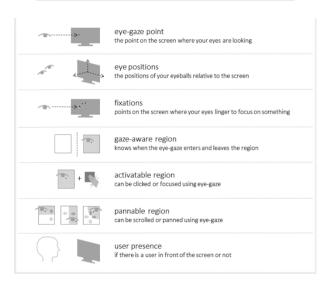
## An introduction to Tobii EyeX

- The Tobii EyeX Engine
  - Is a piece of software that works like an OS extension for eye tracking
  - It knows how to configure and talk to the eye tracker, react to system changes, combine the user's eye-gaze and other input and interpret them as user interactions

- Tobii EyeX Interaction
  - Is a piece of software built on top of the EyeX Engine, and offers a set of basic eye-gaze interactions available out-ofthe-box in the Windows environment.



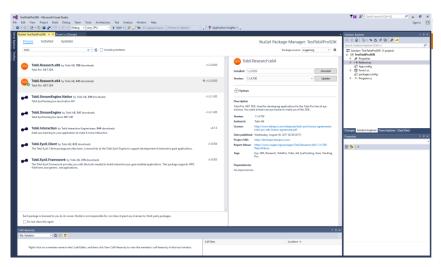




### **Tobii Pro SDK**



- Getting Started :
  - http://developer.tobiipro.com/net/dot net-getting-started.html
  - Install the references through the NuGet
- We suggest to read this link carefully:
  - http://developer.tobiipro.com/tobiipr osdk.html



### **Tobii Pro SDK Document**



- Check this file:
  - https://www.tobiipro.com/siteassets/tobii-pro/usermanuals/tobii-pro-upgrade-key-userinstructions.pdf/?v=1.0



### **Important Links:**



- Download Tobii Eye Tracking Core Software from following link:
  - https://tobiigaming.com/getstarted/
- Tobii SDK is attached in this email.
  - Examples are there.
- Tobii Pro SDK
  - http://developer.tobiipro.com/tobiiprosdk.html
- Tobii Developer Zone:
  - http://developer.tobii.com/
- Tobii Forum:
  - http://developer.tobii.com/community-forums/



# **How to Learn About Eye tracking Studies?**

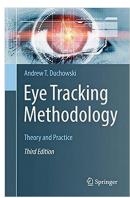


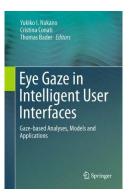
- Check tobii pro learning center:
  - https://www.tobiipro.com/learn-and-support/learn/

Books from library

Come to my office...







## How to find relevant papers?



- Tobii research paper reference library:
  - https://www.zotero.org/groups/tobii\_eye\_tracking\_references/items/collectionKey/4 Q2XBF7N

- SIGCHI (Special Interest Group on Computer-Human Interaction) Database
  - http://dl.acm.org/sig.cfm?id=SP923