Head Orientation App on iPhone

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Outline

- Introduction
- Core Image (CI) framework - CIDetector
- CI2CV
- Head Orientation
- Evaluation & Comparison
Introduction

- Existing Head-Tracking App
  - Sensor Control
  - Face Tracking Control
    - Core Image - CIDetector
- Extensions
  - Improved Face Tracking Control
    - “Cl2CV” SDK
    - Head Orientation
Core Image - CIDetector

* Apple’s build-in class
* Uses image processing to look for features
  * Eye position
  * Mouth position
**CI2CV**

- CSIRO ICT Centre Computer Vision Lab
- Based on OpenCV 2.4
- Face Analysis (More advanced)
  - Track 68 Facial landmarks
Head Orientation

* New Interaction Model
  * Fixed Head position
  * Turning the head to control
Evaluation & Comparison

- Evaluation Mechanism on existing app
- Statistical hypothesis testing

Thank You