ENABLING GAME EXPERIENCES BY GESTURE ANALYSIS IN HIGH RESOLUTION 3D
2D is not enough | We need 3D for size, order etc.

Applications

- Automotive
- Health
- Sport & Fitness
- VR Training
- Television
- Video conference
- Entertainment
- Events
VISION

“To transform the way people interact with the digital world.”

MISSION

“To be the leading provider of 3D imaging & gesture recognition platforms.”

SoftKinetic™

Hardware

Middleware

Applications

3D Camera & Sensor Product Family DepthSense™

3D Gesture Recognition Middleware: iisu™

3D gesture-based games & applications by SoftKinetic Studios
Overview | 3D Resolution

\ DepthSense camera
\ iisu SDK gesture recognition middleware
\ In-game experience – **Interaction Designer™**
DepthSense | 3D Camera

Time-of-Flight (ToF)

Advanced & Patented DepthSense Technology
DepthSense | 3D Camera

3D Technology Evolution

Multi-camera  
resolution  
downscaling  
customization

Time-of-Flight
New Technology

Other 3D Technology

NOW
DepthSense | 3D Camera

Time of Flight = flexibility
Analysis of the user from the depth measurements is **directly usable** in your interface.

**How?**

- ToF + driver + iisu stack does the user analysis at the *Bubbleman* size.
- Interaction Designer lets you easily choose your parameters.
Analyze the User
Interaction Designer™

What does it do?

- Easy-to-use application.
- Allows easy prototyping and production.
- Test & refine gestures in real-time.
- Use pre-recorded video footage.

Already integrated with Unity®/ Flash®

Easy integration with any 3D Engine.
iisu SDK | Modular Stack & APIs

- Other modules
- Plug-Ins
- iisu Tools
- iisu Skeleton
- iisu Parts
- iisu Volume
- iisu UI
- iisu Users
- iisu Scene
- iisu Source

- Interaction Designer
- Body parts
- Upper Body & Hands
- 3D Avatar
- Refine to User-level Primitives
- Depth-map Processing
- Standardized 3D Depth-map | Sensor Calibration

APIs:
- Flash®
- Unity 3D®
- Virtools®
- Scaleform®
Enhancing Creativity:
\ Not just the technology & tools, but also applications.
\ Video games, user interfaces, serious games.

A Completely Markerless User-Experience:
\ No gloves, headsets, special clothing or accessories.

Works Under all Conditions:
\ Does not require any special lighting conditions.
\ Adapts to any scene-setting: home (video game), arcade and fitness centers etc.
\ Allows several users in the scene (family/arcade).
What’s Next? | Faster Processing = More 3D
What’s Next? | Higher Resolution

In the **DepthSense** camera:
- More X-Y resolution in depth.
- Better depth uncertainty.
- More X-Y resolution in color.
- Synchronized RGB+Z.
- Higher frame-rate.
What’s Next? | Higher Resolution

Gesture recognition within iisu:

- Wider field of view.
- Finer detection.
- Biometric ID.
- More robustness.

Try iisu Freemium
iisu 3.0 upcoming
What’s Next? | Higher Resolution

In-game experience:

\ Lower latency.
\ 100% immersive, transparent & intuitive gameplays.
\ Creativity boost for aesthetics and interaction.
Challenges | Higher Resolution

Using the stack for higher resolution:

\, Data transfer bandwidth.
\, Host processing requirements to deal with more data, faster.
Thank You!

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● ● ● The Interface Is You.
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