

Surface computing and beyond: More expressive interaction

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HCI Beyond the Desktop

Tokyo, November 2008

Desktop computing, 2008



Desktop computing, 1978



Surface computing

Surface computing



1. Display-centric

2. Direct input

3. Multi user

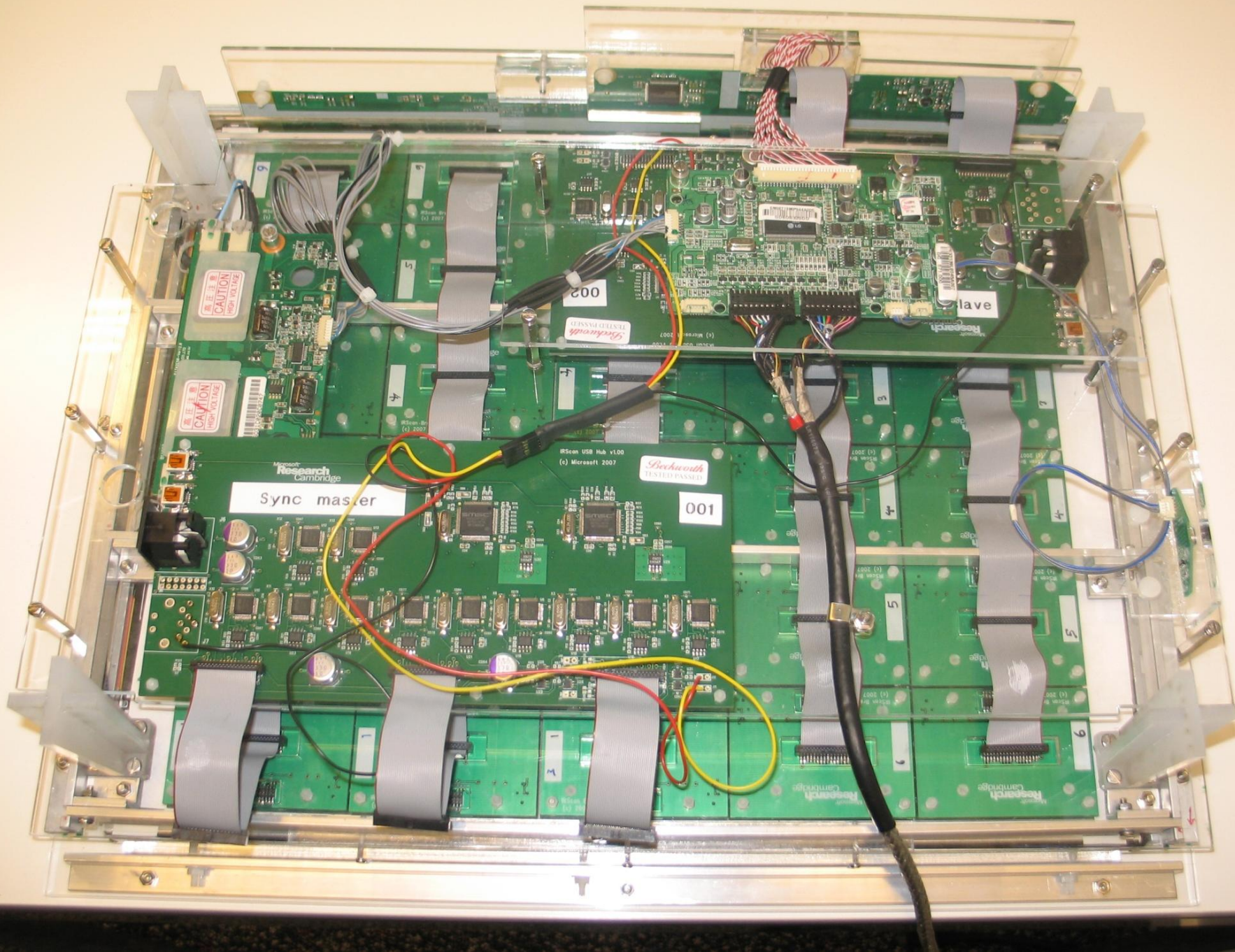
4. Tangible objects

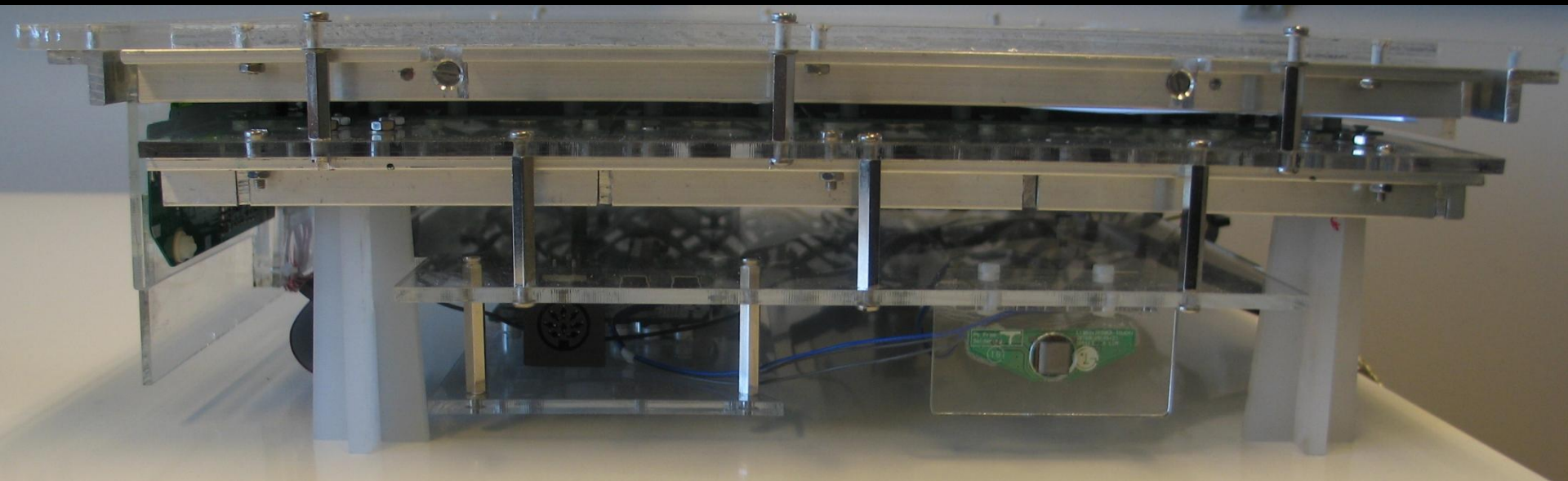
Blending of physical and virtual interaction



ThinSight: Rich sensing in a thin form-factor





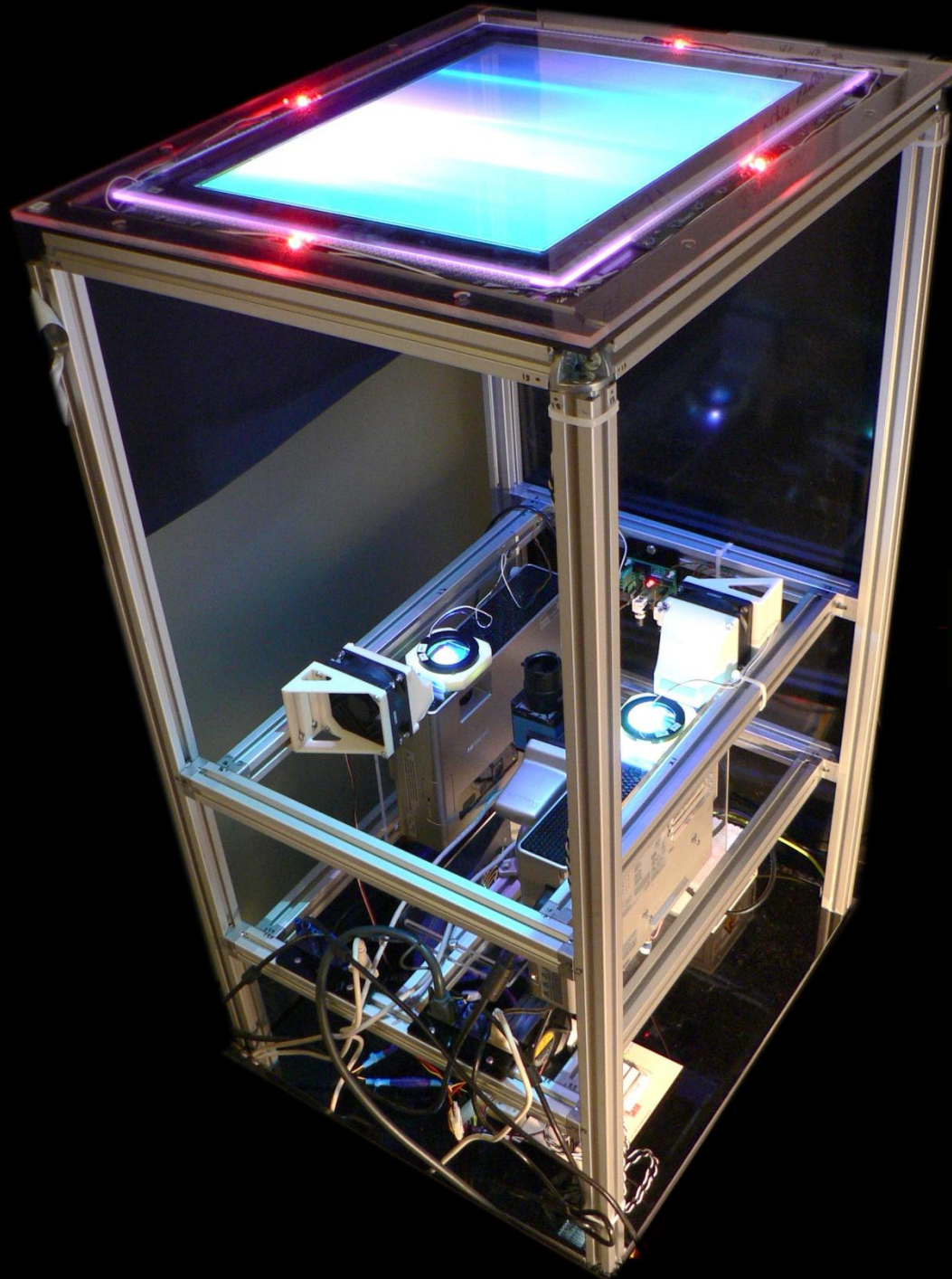


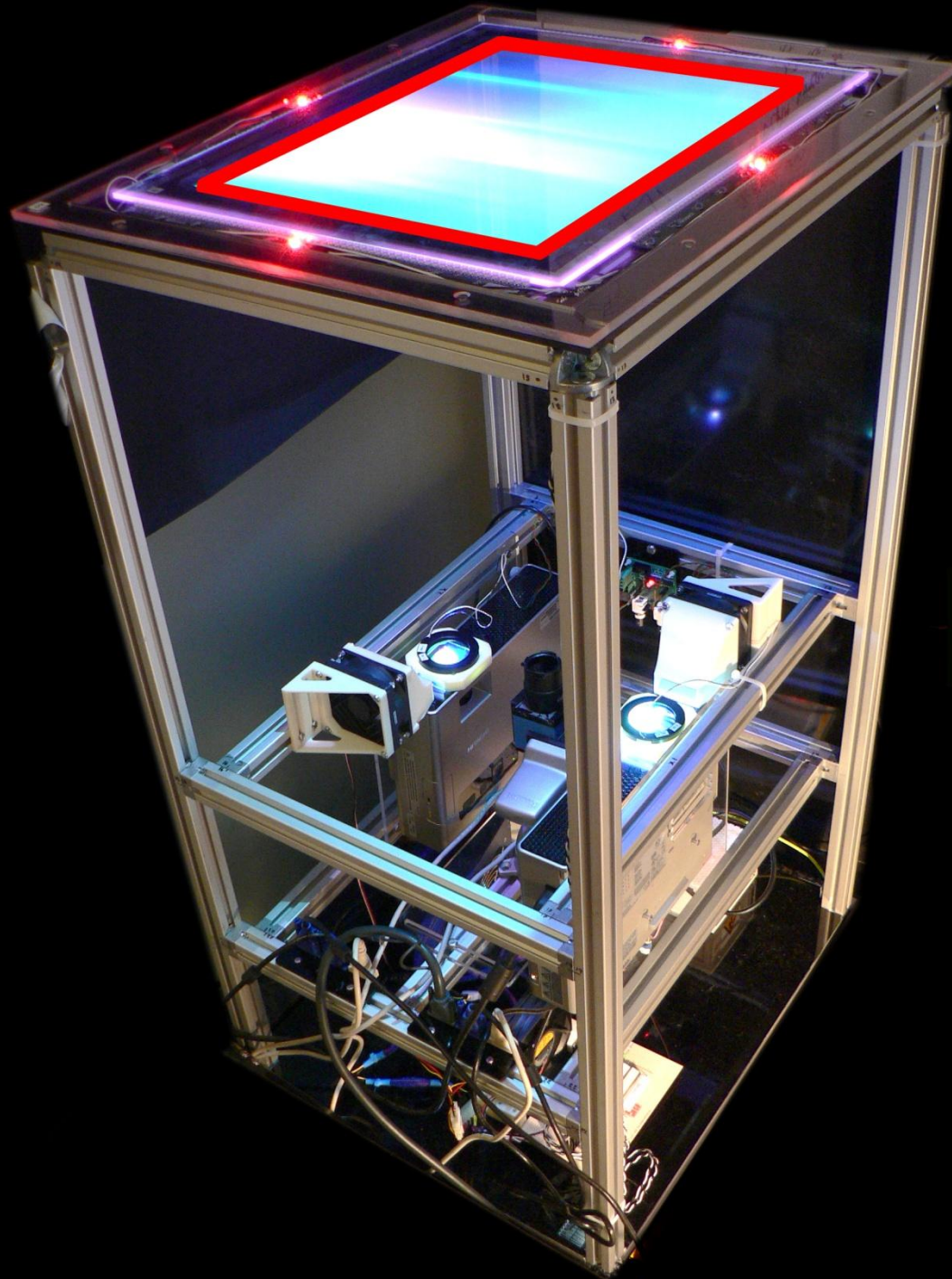
ThinSight surface video

Surface Physics: Expressive and intuitive interaction

Surface physics video

SecondLight: Interaction beyond the display





Second

Second

Light

Second

Light

SecondLight video

Depth-based interaction: Combining physics with SecondLight

Depth-based interaction video

Summary of surface computing research

ThinSight

Surface Physics

SecondLight

Depth-based interaction

Open questions

- What are the killer apps for Surface computing?
- What other interactions paradigms are there?
- Will we ever replace the keyboard and mouse?

Thank you