

COMS W4170

Scaling Up and Down: From Wall-Sized to Hand-Held

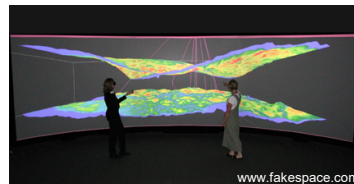
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1

Beyond the Desktop/Laptop

- UIs are getting *bigger* and *smaller*
- Moore's Law + advances in display technology
 - Wall-sized displays
 - Multi-monitor desktops
 - Held and worn

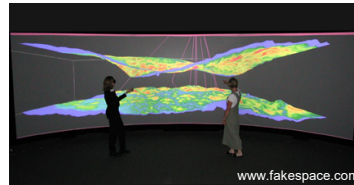


2

Beyond the Desktop/Laptop

- Problem

- How can we present and manipulate information effectively on displays and devices that are very large or very small?



3

How can we select targets faster?

(Practicing what we've learned)

5

Large Displays: Changing the Cursor Geometry

T. Grossman & R. Balakrishnan, CHI 2005

- Area Cursor
 - *Area cursor* (e.g., square/circle) can make it easier to select a small object
 - But, what if multiple objects enter the cursor area?
- Bubble Cursor
 - *Bubble cursor* automatically changes size so that it encloses only the single closest object
 - Changes shape if needed to enclose a single target
 - Closest target computed from Voronoi diagram of objects

One of many techniques that automatically warp the position/shape/size of the cursor, dragged object, or potential targets

