

1. LOOK AT THE DESIRED TARGET



2. PRESS AND HOLD THE HOTKEY



3. LOOK AT TARGET IN MAGNIFIED VIEW



4. RELEASE HOTKEY/TRIGGER



GUIDe

Gaze-enhanced User Interface Design

research overview

The keyboard and mouse have been the dominant forms of input on computer systems. However, with the increasing accuracy and decreasing cost of eye gaze tracking systems it will soon be practical to use gaze as a form of input in addition to keyboard and mouse. This research focuses on exploring how gaze information can be used as an augmented input.

goals

- Validate the technical feasibility of building a low-cost mass-market eye gaze tracking device
- Develop applications/interface enhancements which use gaze information to enhance the user's experience of interacting with the computer
- Develop a taxonomy of application/use scenarios in which the user's gaze information can be used as a primary form of input for computer systems

application categories

- Pointing and selection
- Application/task switching
- Scrolling
- Security
- Utilities

EyePoint™



EyePoint allows users to perform basic mouse operations by using a combination of gaze and hotkeys. It reduces/eliminates the dependency on the mouse for most everyday tasks such as surfing the web.

EyeExposé™

Gaze-based application switching



EyePassword™

Gaze-based password/PIN entry prevents shoulder surfing



EyeScroll™

Off-screen gaze-based scroll targets



EyeSaver™

Turn on screensaver when user looks away and off when user looks back



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Coming soon to: <http://hci.stanford.edu/research/GUIDe>
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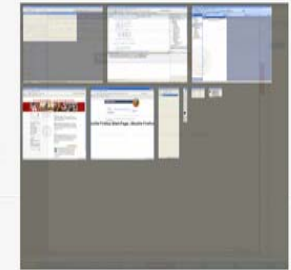
1. CURRENT ACTIVE WINDOW



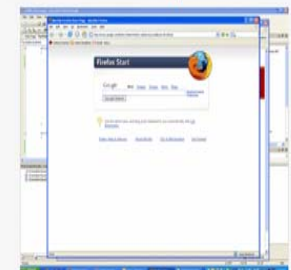
2. PRESS AND HOLD THE HOTKEY



3. LOOK AT TARGET WINDOW



4. RELEASE HOTKEY/TRIGGER



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