GUIDe
Gaze-enhanced User Interface Design

research overview
The keyboard and mouse have been the dominant forms of input in 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 augmenting input.

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

EyePoint™
Surf the Web without a mouse!

EyeExposé™
- Gaze-based application switching
- Gaze-based password entry prevents shoulder surfing

EyeScroll™
- Off-screen gaze-based scroll targets

EyePassword™
- Gaze-based password entry prevents shoulder surfing

EyeSaver™
- Turn on screen saver when user looks away and off when user looks back

goals
- Validate the technical feasibility of building a low-cost mass-market eye gaze tracking device
- Explore application 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

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Coming soon to: http://hci.stanford.edu/research/GUIDe

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