

전자전기컴퓨터학부



## 1. 제 목: On learning properties of human hand trajectory when using natural user interface

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7. 내용요약 :

The major problem in using natural user interface as a pointing device is physical fatigue. To make it more comfortable and increase its usability, we designed three types of transfer functions from the user's hand to the screen and carried out a reaching task to a few subjects. It is discovered that the skewness of the speed history increases monotonically among all subjects while learning. Also, I am going to introduce a browser used in this study and is being developed for displaying any types of file to gather a mass of trajectory data.

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## On learning properties of human hand trajectory when using natural user interface

## Abstract

The major problem in using natural user interface as a pointing device is physical fatigue. To make it more comfortable and increase its usability, we designed three types of transfer functions from the user's hand to the screen and carried out a reaching task to a few subjects. It is discovered that the skewness of the speed history increases monotonically among all subjects while learning. Also, I am going to introduce a browser used in this study and is being developed for displaying any types of file to gather a mass of trajectory data.



Fig 1. Natural User Interface: By narrowing the move range of hand, humans can manipulate the pointer on the screen with less physical load.



Fig 2. Skewness of speed history during learning process: Throughout the learning process, the skewness is monotonically growing in all subjects.