

A low-cost self-expression system for paralyzed patientsJiheum Park¹ and Heechan Kim ^{2*}

1. Interdisciplinary Program, Bioengineering Major, Graduate School,
Seoul National University, Seoul, Korea
2. Department of Biomedical Engineering, College of Medicine and Institute of
Medical and Biological Engineering, Medical Research Center, Seoul National
University, Seoul, Korea
hckim@snu.ac.kr

A low-cost self-expression system for paralyzed patients whose eyes' movement is only freely available is proposed. The system consists of a web cam and a graphical user interface designed to display brief expressions of their intention simply by clicking with their eye movements. The system efficiently detects and tracks user's irises without infrared light which makes the most commercial eye tracking devices more expensive. Blink detection and continuously adaptive mean shift (camshift) tracking was used to accurately track iris in real-time with high speed. The performance of the system has been evaluated and demonstrated by the experiment.

References

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