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Gesture Sensor Technology for Operating System Control

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Abstract: *This project describes a novel hand gesture recognition system that utilizes both multi- channel surface electromyogram(EMG) sensors and Web Camera to realizeuser-friendly interaction between human and computers. Human gesture recognition consists of identifying and interpreting automatically human gestures using a set of sensors (webcam). Therefore, cursor of mouse will move according to hand movements acrossthe screen. The accuracyof the recognition will depend on time spent on user training for high accuracy specific user training is required. We used SVM algorithms and open CV library which sense the gesture by image processing and extraction and desired action performed.*

Keywords: Hand gesture, sensors, Web Camera, electromyogram(EMG), human, computers, natural interaction, human computer interface, OS.

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