

Gesture Recognition & Control



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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

*In the name of Allah, The Most Beneficent,
The Most Merciful*

Date: _____

CERTIFICATE

We accept that work contained in the degree project report titled Gesture Recognition & Control as a confirmation to the required standard for the partial fulfillment for the degree of BCE.

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Dedication

We have decided to dedicate this effort to the people in our lives who are most important to us. Our Parents.

Abstract

Technological advancements have broken all boundaries of interaction. In a world where remote controls are considered old-school, human-machine interaction touches surprisingly elevated levels. This thesis includes introduction to Digital Image Processing and Game development. With an enhanced utilization of both technologies, a complete project has been designed which obtains hand gestures of the user in the form of image frames. These frames are then, through a decision based model, fed into a game environment as input controls. The system uses state-of-the-art software technology to carry out large amounts of algorithmic calculations in just a few microseconds. With an advanced user friendly environment, this system is bound to attract anyone who is willing to replace his joystick, keyboard or mouse with hand-action. Hand gesture recognition system has been used to provide the interface between the digital environment and human user.

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