

عنوان مقاله:

Volume Measurement of Human Hand by Using Digital Image Sequences

محل انتشار:

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نویسندگان:

Mahdi Arghiani - *Engineering Department, Tarbiat Moallem University of Sabzevar, Sabzevar, Iran*

Ehsan Nemati - *Engineering Department, Tarbiat Moallem University of Sabzevar, Sabzevar, Iran*

Hadi Sadoghi Yazdi - *Engineering Department, Tarbiat Moallem University of Sabzevar, Sabzevar, Iran*

خلاصه مقاله:

In this paper, we introduce the new method for volume measurement of rigid objects. A machine vision algorithm is developed which estimates human hand volume from two-dimensional digital images that captured from different views. The proposed algorithm is general and can easily be used for other objects. The novelty of our method lies on the use of ordinary devices, simple algorithm for implementation, and high speed in running program. Main idea includes volume measuring using projection of object image from different views. Error compensation in object detection and feature extraction is performed using suitable estimators such as adaptive neuro fuzzy inference system and support vector regression. Ability of the proposed system is studied in volume measurement of box and human hand.

کلمات کلیدی:

Image Processing; Volume Measurement; Human Hand; Adaptive Neuro Fuzzy Inference System; Support Vector Regression

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