عنوان مقاله:

Potato defect detection using Computer vision and Neural Networks

محل انتشار:

اولین کنفرانس ملی مهندسی برق اصفهان (سال: 1391)

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خلاصه مقاله:

World potato consumption is headed up, growing at an annual rate of 4.5%. Detection of external defects on potatoesis the most important technology in the realization of automatic potato grading stations. A real time system isproposed in this article; HSV color space is used to remove background following image acquisition step. Afterwards,co-occurrence texture features are extracted from the image, and finally three different Neural Networks are trainedand validated to select the better classifier for defect detection. Results showed that the Support Vector Machinenetworks represent a higher performance in the direction of Multi Layer Perceptrons and Radial Basis .Functionnetworks for potato classifications

کلمات کلیدی:

Potato Defect Detection, Real Time (RL), Morphological Operations, Otsu thresholding, Color-space, Support Vector Machines, Multi Layer Perceptrons, Radial Basis Function