

Automatic expert system based on images for accuracy crop row detection in maize fields

Mohammadbagher Shafienia*,

Processor machine vision system for robots increasingly specific processes used in agricultural lands. In this manner the robot on a large area of land on which the visual system could provide a lot of information and serves routing. Of course the important thing is that the use of machine vision product line to detect and identify weeds, many studies have been conducted in this area is arable. This study aimed to determine the authenticity of images based expert system automatically carried out on the maize crop rows. In this study, the use of "fuel-old" as well as a linear regression coefficient of correlation is done by multiplying the-Pearson. Based on quantitative and qualitative analysis, this research confirms that the superior performance and higher fuel-old Pearson product-moment, in terms of precision and in terms of processing time, is acceptable. Future improvements can be achieved when high pressure mass of weeds in the picture there are a large number of weeds on inter-row spacing is available, be considered.

Keywords : Identify crops, image segmentation, expert systems, machine vision, Corn

[Islamic Azad University, Rasht Branch - Thesis Database](#)
[دانشگاه آزاد اسلامی، واحد رشت - سامانه بانک اطلاعات پایان نامه ها](#)