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TECNÓLOGO EN MECATRÓNICA

A

JUAN CAMILO LONDOÑO LOPERA

Cédula 1.035.421.830

El presente título se expide por haber satisfecho los requisitos académicos y administrativos correspondientes del programa, con registro ante el Ministerio de Educación Nacional 9821

Para constancia se firma en la ciudad de Medellín a los 03 días del mes de diciembre de 2010.

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Automatic Visual Classification of Parking Lot Spaces: A Comparison Between BoF and CNN Approaches

Workshop on Engineering Applications

WEA 2018: Applied Computer Sciences in Engineering pp 160-170 | Cite as

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Abstract

Computer vision has a wide and diverse range of applications nowadays. A particular one is automatic detection of parking lot occupancy, where a computer has to identify whether a parking lot space is empty or occupied. As in any visual classification problem, detecting parking lot spaces relies on the existence of a representative visual dataset. This problem of binary classification is commonly approached using features with adequate level of invariance to changes in illumination or rotation, that allow feeding these features into classifiers such as the SVM. Most used approaches are based on the use of

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Keywords

Images processing Invariance Parking lot Convolutional Neural Networks Bag of features

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Positioning of the Cutting Tool of a CNC Type Milling Machine by Means of Digital Image Processing

Colombian Conference on Computing

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- Juan Camilo Londoño Lopera (1) View author's OrcID profile (View OrcID profile)
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1. Servicio Nacional de aprendizaje, , Medellín, Colombia

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Abstract

Currently, technological developments and scientific advances have driven the manufacturing industry. This allows processes to generate more quickly and efficiently. The machining process is carried out in conventional machines and tools where one or several people have different tasks. This entailed a risk for the personnel involved and the production times vary depending on the operator's experience. The numerical control machines are a solution to these problems. However, this automatic process still needs human intervention to complete some tasks. Current, research in the area of artificial vision has improved the machining processes in order to meet the demand of the industry. This article presents the implementation of an artificial vision system within a machining process, Specifically looking for the zero point or reference for a CNC milling machine. The procedure is done manually and depending on the skill of the operator could generate delays in the machining process and showing differences in measurement due to initial calibration.

Keywords

CNC Images processing Machines tools

Servicio Nacional de aprendizaje.

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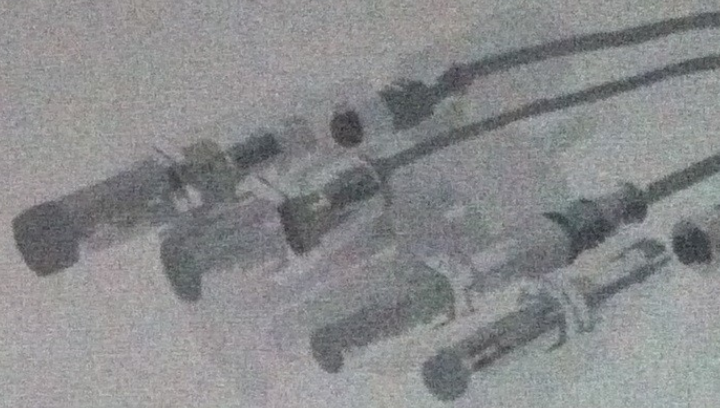
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Con el trabajo:

Positioning of the cutting tool of a CNC type milling machine by means of digital image processing

Por asistir al:

13º CONGRESO COLOMBIANO DE COMPUTACIÓN 2018

Sociedad Colombiana de Computación

realizado el 26, 27 y 28 de septiembre de 2018

Cartagena de Indias

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El futuro digital es de todos

MinTIC

Platzi

Certifican a

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Con número de identificación

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Por participar y aprobar el curso de estrategias para

APRENDER EN LÍNEA EFECTIVAMENTE

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