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### Patent Search

Invention Title	AI AND IMAGE PROCESSING BASED MEDICINE STOCK MAINTENANCE SYSTEM FOR HOSPITALS
Publication Number	50/2022
Publication Date	16/12/2022
Publication Type	INA
Application Number	202241070019
Application Filing Date	05/12/2022
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	G06N0020000000, G06K0009620000, G06N0003080000, G06N0020200000, G06N0003040000
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### Abstract:

Abstract: This invention monitors the medicine stock in hospitals and pharmacies employing machine vision based application installed and operated from computing image of the rack consisting of Medicines is taken in as input for a trained ensemble machine learning model and the output generated. The generated output is a propercentage value of whether the stock is changed or unchanged. Large volumes of training dataset are collected for training the ensemble machine learning based m stock maintenance. This dataset consists of classified tablet images segregated into two classes: changed and unchanged. The machine learning algorithm that is emply will be an ensemble of Convolutional Neural Network and Support Vector Machine. In ensemble machine learning the separate outputs of more than one machine lealgorithm is taken and a combinational threshold condition is set. This will increase the accuracy of prediction by a huge magnitude. Every single time a rack containing stock is identified either as an changed or unchanged one, that image data is also added to the database. The newly collected image data is stored-and periodically mesegregated with experts and again given it as training dataset. The above process is repeated till exceptionally high accuracy is achieved 'in identifying the stock is chaunchanged.

### **Complete Specification**

### Claims:

- 1) A machine vision based solution with Al and image processing for identification and assessment of medicine stock in hospitals.
- 2) As claimed in Claim 1, the employment of camera in hospital medicine inventory to capture the image of medicine stock.
- 3) As claimed in Claim 1, the employment of Artificial Intelligence based image processing for assessment of medicine stocks from captured images.
- 4) As claimed in Claim 1, the employment of Internet for displaying the obtained results by AI based image processing.
- 5) As claimed in Claim 1, the employment of a cloud server to store and analyze the collected data.

**View Application Status** 



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Application Details				
APPLICATION NUMBER	202241070019			
APPLICATION TYPE	ORDINARY APPLICATION			
DATE OF FILING	05/12/2022			
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TITLE OF INVENTION	AI AND IMAGE PROCESSING BASED MEDICINE STOCK MAINTENANCE SYSTEM FOR HOSPITALS			
FIELD OF INVENTION	COMPUTER SCIENCE			
E-MAIL (As Per Record)				
ADDITIONAL-EMAIL (As Per Record)				
E-MAIL (UPDATED Online)				
PRIORITY DATE				
REQUEST FOR EXAMINATION DATE				
PUBLICATION DATE (U/S 11A)	16/12/2022			

### **Application Status**

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