LITERATURE SURVEY ON RETAIL STORE STOCK INVENTORY ANALYTICS

S.NO	PAPER NAME	DESCRIPTION	AUTHOR	YEAR	REFERENCE
1.	Combination of Advanced Robotics and Computer vision for Shelf Analytics in a Retail Store	A Double Robot used to patrol the store in fixed path and capture images of retail shelves at real time. These images used to address challenges like stock out problem and misplaced products.	Gopichand Agnihotram, Navya Vepakomma, Suyog Trivedi, Sumanta Laha, Nick Isaacs, Srividya Khatravath, Pradeep Naik, Rajesh Kumar.	2017	https://ieeexplore.ieee.org/document/8423894
2.	Development of Smart Sensor Array Mat for Retail Inventory Management	A piezo-resistive sensor mat is used to track the base structure shape of the stock. The sensor mat was used to reduce the mismatching of items caused by human error.	Ruiqi Lim, Musafargani Sikkandhar, Ming-Yuan Cheng.	2022	https://ieeexplore.ieee.org/document/9816441
3.	Towards Intelligent Retail: Automated on-Shelf Availability Estimation Using a Depth Camera	A consumer-grade depth sensor was used to detect out-of-stock situation. The output of the system is used to generate alerts for store managers, as well as to update product availability continuously. No prior knowledge about the product is required.	Annalisa Milella Antonio Petitti ,Roberto Marani Grazia Cicirelli, Tiziana D' orazio	2020	https://ieeexplore.ieee.org/document/8963979
4.	Exploiting Egocentric Vision on Shopping Cart for Out-Of-Stock Detection in Retail Environments	A deep learning approach for the detection of Out-Of-Stock (OOS) was developed. A Convolutional Neural Network (CNN) was trained to predict attention maps that are useful to find OOS areas and suggest the retail employers where to intervene. This result in both objective measures and subjective measures.	Dario Allegra, Mattia Litrico, Maria Ausilia Napoli Spatafora, Filippo Stanco, Giovanni Maria Farinella	2021	https://ieeexplore.ieee.org/document/9607839
5.	Store-sales Forecasting Model to Determine Inventory Stock Levels using Machine Learning	The prediction models Random Forest and XGBoost regressor are used to give better accuracy in predicting sales.	Akanksha Akanksha, Devesh Yadav, Deepak Jaiswal, Ashwani Ashwani, Ashutosh Mishra	2022	https://ieeexplore.ieee.org/document/9850468