

**A PROJECT REPORT ON**

# **DESIGN & ANALYSIS OF HOTEL SERVICING ROBOT**

A project report submitted in partial fulfillment of the requirements for the award of the Degree of

**BACHELOR OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

**SUBMITTED BY**

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**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**An NACC & N.B.A. Accredited institution, Approved by AICTE, Affiliated to**

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## **CERTIFICATE**

This is certify that the project work entitled **“DESIGN & ANALYSIS OF HOTEL SERVICING ROBOT”** is a bonafide record of work done by **RAJANA HARISH (19815A0368), PAVAN KALYAN DODDI (19815A0359), PEDIREDLA SAI (19815A0362), BADDETI ANJANEYULU (19815A0398)**, students of final year B.tech in the department of mechanical engineering. This work is done for the partial fulfilment of the requirement for the award of Bachelor of technology in **MECHANICAL ENGINEERING** by Jawaharlal Nehru technological university, Kakinada During the year 2018-2022.

**PROJECT GUIDE**

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## ABSTRACT

The objective of the project is to develop the robo which can function as a Hotel server. Which will be capable of taking orders from customers and serve food.

With rapid advances in technologies, especially in artificial intelligence, smart sensors, big data analytics, and robotics, the service industry began introducing robots to perform a variety of functions. While the main purpose of deploying robots has been productivity improvement, the current COVID-19 pandemic has brought more urgent purpose, providing contactless service for social distancing. This study explores the service quality provided by robots based on real data in a hotel setting

The study aims to provide a sustainable development model for the restaurant business, which is suffering from a shortage of manpower. The study identifies the relationships among serving robots' attributes, perceived benefits, perceived risks, perceived value, satisfaction, and revisit intention of customers. Moreover, satisfaction has a positive effect is of high importance. Based on these findings, several meaningful theoretical and practical implications that can lead to the sustainability of restaurants are presented.