

3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year										
Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
MODELING, ANALYSIS AND FABRICATION OF HOTEL SERVICING ROBOT	Dr V Hari Kiran	Mechanical Engineering	IIP Series, Volume 3, Book 4 , Part 4 ,Chapter 1	2024		International	2024	e-ISBN: 978-93-5747-908-0	Avanathi Institute of Engineering and Technology, Makavarapalem	IIP Series
	A N S Surya Prakash	Mechanical Engineering								
	N V Ashok Kumar	Computer Science & Engineering								
	S Rishikesh	Electrical & Electronics Engineering								
GRID INTEGRATION OF RENEWABLE ENERGY SYSTEM WITH ARTIFICIAL NEURAL NETWORK CONTROL	VARAHAL A DORA PETLA	Electrical & Electronics Engineering	IIP Series, Volume 3, Book 4, Part 3, Chapter 3	2024	Futuristic Trends in Renewable & Sustainable Energy	International	2024	e-ISBN: 978-93-6252-602-1	Avanathi Institute of Engineering and Technology, Makavarapalem	IIP Series



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MODELING, ANALYSIS AND FABRICATION OF HOTEL SERVICING ROBOT

Abstract

The research intends to provide a framework for long-term growth in the hospitality sector, which is now experiencing a severe scarcity of workers. The study establishes causal links between the features of a serving robot, customer satisfaction, risk aversion, perceived value, and the likelihood of a return visit. Furthermore, it is crucial that contentment has a positive impact. Several significant theoretical and practical implications that can contribute to the sustainability of restaurants are offered in light of these findings. Rapid developments in AI, smart sensors, big data analytics, and robotics have led to their widespread use in the service industry, where they are used to perform a variety of activities. The main goal of putting robots to work has been to increase output, but the COVID-19 pandemic has made a more urgent goal: providing contactless services to keep people from being alone. Data from actual hotel guests is used in this investigation of how well robots can serve customers. The objective of this project is to build a robot waitress capable of taking and fulfilling guest orders in a hotel.

Keywords: Serving Robots, Workforce Scarcity, Risk Aversion, Perceived Value, Sustainability, AI and Robotics, Contactless Services, Emerging Technologies, CATIA, ANSYS

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GRID INTEGRATION OF RENEWABLE ENERGY SYSTEM WITH ARTIFICIAL NEURAL NETWORK CONTROL

Abstract

This paper focuses on effective integration of solar photovoltaic system to the distribution grid. In this regard an artificial neural network (ANN) based maximum power point tracking (MPPT) is employed for the PV system. A DC-DC boost converter along with the single phase bridge inverter is developed for the PV system to grid integration. The training of ANN is performed using the historical data related to solar insolation. The analysis is concentrated on assessing voltage and current at the grid as well as at the load side subjected to variations in PV partial shading conditions. In this regard, the voltage current and power variations at the source, grid, and load side are analysed. Simulation analysis showcased that, under the PV partial shading conditions also the proposed ANN methodology able to locate the maximum power point (MPP) while integration to the grid.

Keywords: ANN controller, MPPT technique, DC-DC boosts converter, Partial shading, and Photo voltaic system.

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