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IOT And AI – Powered Personalized Guest Engagement

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Abstract— In order to improve visitor engagement and event customisation, this paper describes the design and implementation of a virtual concierge system based on AI and IoT. The system incorporates a chatbot driven by Natural Language Processing (NLP) for real-time communication, IoT sensors to detect the presence of guests, and facial recognition technologies to identify guests. Additionally, it uses cloud storage to synchronize data in real-time and actuators to carry out physical tasks like presenting guests with roses. Key technologies include OpenCV for image processing, Convolutional Neural Networks (CNN) for facial recognition, and frameworks like Dialogflow or Rasa for chatbot creation. The system makes sure that hardware elements like servo motors, cameras, motion sensors, and ESP32 microcontrollers integrate seamlessly. Through the automation of data administration and visitor interaction, this system offers a novel approach to event and hospitality management, demonstrating how AI and IoT can be used to create individualized experiences.

Key words: IoT sensors, chatbot interaction, natural language processing (NLP), facial recognition, convolutional neural networks (CNN), cloud storage, automation, guest engagement, event management, and virtual concierges powered by AI.

I. INTRODUCTION

The need for automation and personalization has spread to a number of industries, including event planning and hospitality, in the quickly changing technological landscape of today. Conventional guest interaction techniques can frequently be manual, ineffective, and impersonal, particularly at business meetings or alumni events. This study suggests a Virtual Concierge System driven by AI and IoT that improves visitor experiences by automating and personalizing tasks in real time.

The system uses IoT devices to identify visitors using facial recognition and motion sensors to detect their presence. This makes it possible for interactions to be context-aware and customized to meet the needs of certain events and personal preferences. By using Natural Language Processing (NLP) to answer questions from visitors, provide event-related information, and customize their experience, an AI-powered chatbot guarantees meaningful engagement. By further automating physical duties like giving tiny tokens of appreciation or offering roses, actuators like servo motors provide the interaction a special and considerate touch.

Improving operational efficiency while giving guests an unforgettable and interesting experience is one

of the system's main goals. The solution frees up event planners to concentrate on other facets of event management by automating repetitive processes and reducing the need for manual intervention. By ensuring safe and centralized data processing, cloud-based storage allows for scalability and real-time synchronization. Through resource optimization, this strategy not only improves the visitor experience but also advances sustainability.

The design incorporates cloud-based solutions for real-time data synchronization and storage, OpenCV for image processing, and Convolutional Neural Networks (CNN) for facial recognition. This guarantees the safe and effective processing of visitor data, promoting a smooth information exchange amongst system elements. Scalability, privacy, and adaptability are key components of the system's architecture, which makes it appropriate for a variety of uses, from intimate get-togethers to major events.

architecture, The tools, techniques, and algorithms of the system are extensively addressed in this work. It also draws attention to the challenges encountered during development and the strategies employed to get beyond them. This study intends to illustrate how intelligent systems may revolutionize guest engagement and operational efficiency in contemporary hospitality environments by demonstrating the capabilities of IoT and AI technology in event management.

II. RELATED WORK

A. Paper Title: The adoption of artificial intelligence and robotics in the hotel industry: prospects and challenges, Authors:Kichan Naml & Christopher S. Dutt 2 & Prakash Chathoth1 & Abdelkader Daghfous1 & M. Sajid Khan1, Year of publication: 2020

The project integrates IoT and AI technology to improve visitor interactions at college and alumni events. The system uses OpenCV and CNN models for facial recognition to identify visitors and interact with them using AI-powered chatbots based on Dialogflow or Rasa frameworks. ESP32 microcontrollers, motion sensors, cameras, and actuators are examples of IoT devices that enable real-time interactions, such as automating motions like sending roses. Real-time updates and accessibility are ensured by using Firebase to synchronize guest data. Problems with data privacy, hardware dependability, scalability, and reliance on steady network connectivity exist despite its creative approach. With its smooth interactions and effective management, this system VOLUME: 09 ISSUE: 04 | APRIL - 2025

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demonstrates how automation and personalization can revolutionize event experiences.

Citation: [1] Kichan Nam1 & Christopher S. Dutt 2 & Prakash Chathoth1 & Abdelkader Daghfous1 & M. Sajid Khan1, R. *The adoption of artificial intelligence and robotics in the hotel industry: prospects and challenges (2020).* Institute of Applied Informatics at University of Leipzig.

B. Paper Title: Personalized Robot Assistant for Support in Dressing, Authors: Aleksandar Jevtic', Andrés Flores Valle, Guillem Alenyà, Member, IEEE, Greg Chance, Praminda Caleb-Solly, Sanja Dogramadzi, and Carme Torras, Senior Member, IEEE, Year of publication : 2019

In this work, a tailored robotic assistant that helps people with mobility disabilities with dressing activities is shown. The system integrates artificial intelligence, computer vision, and human-robot interaction, with a focus on user comfort, safety, and customization. Individual tastes, body shapes, and dressing styles can be accommodated by the assistant's modular architecture, which includes a robotic arm, sensors, and machine learning algorithms. Early user data helps enhance the system, and real-time sensor feedback guarantees safe operation. Notwithstanding the encouraging advancements in autonomy, difficulties include costly initial calibration, restricted recognition of intricate textiles in a variety of settings, scaling issues, and high costs. This study highlights the revolutionary potential of robotics in personal support, with a focus on user collaboration, safety, and adaptability in the development of successful assistive technology.

Citation: [2] Jevtic, A., Dogramadzi, S., Caleb-Solly, P., Alenya, G., Chance, G., Valle, A. F., & Torras, C.*Personalized robotic assistant for dressing (2019).* IEEE transactions on cognitive and developmental systems, vol.

C. Paper title: Artificial Intelligence (AI) Brings Enhanced Personalized User Experience, Authors: T. Bronzin, B. Prole, A. Stipić, and K. Pap CITUS, Zagreb, Croatia, Year of publication : 2021

This article examines how AI can be used into the cultural and tourism industries, emphasizing how digital and immersive technology can improve user experiences. By reimagining the entire tourist experience-marketing, planning, visiting, and memory preservation-the study shows how artificial intelligence (AI), virtual reality (VR), augmented reality (AR), and mixed reality (MR) can turn conventional tourism into dynamic and captivating experiences. The architecture highlights how IoT and GIS may be used to create engaging digital platforms for activities like trips to museums and city tours, using AI-driven applications like multimedia integration and 2D image recognition. However, the conceptual nature of the study, the expensive cost of technology, and its dependence on pre-made digital content make it difficult to apply more widely. The results show how AI may revolutionize the travel industry, with a focus on early adoption and steady expansion to accommodate changing user needs and industry demands. Citation: [3] Stipić, A., Bronzin, T., Prole, B., & Pap, K.

Artificial Intelligence (AI) Brings Enhanced Personalized User Experience(2021). MIPRO 2021: Proceedings of the 44th International Convention on Electronics, Microelectronics, and Information and Communication Technology. D. Paper title: Smart Hospitality Review: Using IoT and Machine Learning to Its Most Value in the Hotel Industry, Authors: Amandeep Kaur, Sonali Goya, Neera Batra, Year of publication : 2023

The integration of IoT with machine learning (ML) in the hospitality sector is examined in this paper, with a focus on enhancements to operational performance, energy efficiency, and guest experiences. The review emphasizes the significance of IoT in smart environments and the application of machine learning (ML) for demand forecasting and predictive analytics by combining case examples and previous research. Notwithstanding its promise, the study points out that there aren't many case studies that are relevant to the area and that there hasn't been much research done on scalability in various hospitality situations. The contribution of IoT to energy management and operational monitoring, the improvement of demand forecasting and customization by ML, and the ongoing difficulties with data privacy and ethical issues in wider adoption are some of the important observations.

Citation: [4] Goyal, S., Batra, N., and Kaur, A. (2024). *Smart Hospitality Review: Using IoT and Machine Learning to Its Most Value in the Hotel Industry (2024).* International Conference on Automation and Computation (AUTOCOM).

E. Paper title:Innovative Approaches in Hotel Management: Integrating Artificial Intelligence (AI) and the Internet of Things (IoT) to Enhance Operational Efficiency and Sustainability, Authors: Tamara Gaji'c, Marko D. Petrovi'c , Ana Milanovi'c Peši'c , Mom'cilo Coni'c and Nemanja Gligorijevi'c, Year of publication : 2024

This study investigates how to improve operational efficiency and sustainability in the hotel business by integrating AI and IoT. The study illustrates how these technologies optimize resource management, lower energy usage, and support global sustainability goals using quantitative methods and structural equation modeling (SEM) based on data from 220 hotel managers in Serbia. Findings support the important role AI and IoT play in enhancing sustainability through energy conservation and customized guest experiences, as well as increasing efficiency through automation, predictive analytics, and real-time resource management. The study's dearth of longitudinal data, reliance on managerial opinions, and Serbian emphasis, however, restrict how broadly the findings may be applied. Barriers to wider adoption still include issues like high implementation costs, data privacy concerns, and technological advancement.

Citation: [5] Pešić, A.M., Conić, M., Gajić, T., Petrović, M.D., & Gligorijević, N. *Innovative Approaches in Hotel Management: Integrating Artificial Intelligence (AI) and the Internet of Things (IoT) to Enhance Operational Efficiency and Sustainability (2024)*. Sustainability, 16(7279).

F. Paper title: Guest Editorial: Internet of Things for In-Home Health Monitoring, Authors: Joel J. P. C. Rodrigues, Honggang Wang, Simon James Fong, Nada Y. Philip, and Jia Chen, Year of publication : 2021

The Internet of Medical Things (IoMT) and its applications in in-home health monitoring are the main topic of this editorial,

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which also highlights developments, difficulties, and possible applications in remote healthcare. It addresses problems at the application, security, and communication levels while examining real-time monitoring, automation, and predictive analytics through a thematic review of a few chosen studies. IoMT improves monitoring and care delivery by facilitating real-time data sharing between patients and healthcare providers. communication protocol Data security, dependability, and integration with current healthcare systems are still issues, nevertheless. Wearable technology, edge computing, and AI-driven analytics are some examples of applications; nevertheless, more comprehensive understanding is hindered by lack of empirical data and the scant investigation of socioeconomic adoption determinants.

Citation: [6] Chen, J., Philip, N. Y., Fong, S. J., Wang, H., and Rodrigues, J. J. P. C. *Guest Editorial: Internet of Things for In-Home Health Monitoring*(2021). Ieee Journal On Selected Areas In Communications.

G. Paper title: Developing Personalized Marketing Service Using Generative AI, Authors: Gun Ho Lee, Kyoung Jun Lee, Baek Jeong, And Taekyung Kim, Year of publication : 2023

This study presents a *Persuasive Message Intelligence (PMI)* system that uses GPT-4 and other Large Language Models (LLMs) to generate customized marketing messages. The technology improves customer engagement and addresses scalability and cost concerns in conventional approaches by fusing persuasion theories with AI-generated messages. Using user-specific information such as past purchases and event dates, prompt engineering allows for customized messaging, and system prompts guarantee uniformity. Workflows are visualized using BPMN and evaluated on Google Colab, and the implementation makes use of GPT-4 and SMS APIs. Personalized, non-AI-perceived communications increase engagement and effectiveness, according to surveys. Concerns about privacy, issues with transparency that undermine trust, and scalability constraints brought on by reliance on outside AI services are obstacles, nevertheless. The emphasis is on GDPR compliance and subtle personalization to strike a balance between user comfort and marketing effectiveness.

Citation: [7] Lee, G. H., Lee, K. J., Jeong, B., & Kim, T. (2024). *Developing Personalized Marketing Service Using Generative AI*, IEEE Access DOI: 10.1109/ ACCESS.2024.3361946.

H. Paper title: An IoT based Smart Home with Virtual Assistant, Authors: T.M.N.Vamsi, B.Suchitra, Sai Kumar, K.V.V.Varma, K.N.S.Harshit Kumar, Year of publication : 2021

In this study, a Raspberry Pi microcontroller-based Internet of Things (IoT) smart home system that combines automation and security is presented. Features like voice-activated home automation, news and weather updates, and real-time warnings via WhatsApp, SMS, and email when a guest is recognized are made possible by the system's Pi camera, microphone, relay interface, and speakers. To differentiate between owners and strangers, the surveillance module employs the Eigenface algorithm for facial recognition. Google APIs are used to operate appliances, while Python programming is used for system logic. The image quality of the 5MP Pi camera, possible difficulties with the Eigenface algorithm in different lighting conditions, and the system's scalability because of reasonably priced technology are some of the limitations. Although the system focuses on simple appliances, it offers a practical and affordable solution with room to develop in the future with more sensors and advanced smart home capabilities.

Citation: [8] T.M.N. Vamsi, B. Suchitra, Sai Kumar, K.V.V. Varma, K.N.S. Harshit Kumar. *An IoT based Smart Home with Virtual Assistant*(2021). 6th International Conference for Convergence in Technology (I2CT)

I. Paper title: Improving the service industry with hyperconnectivity: IoT in hospitality, Authors: Suat Mercan, Lisa Cain, Kemal Akkaya, Mumin Cebe and Selcuk Uluagac, Miguel Alonso, Cihan Cobanoglu, Year of publication : 2020

This study examines how IoT technologies affect the hotel sector, emphasizing how they can boost client pleasure, expedite processes, and give businesses a competitive advantage. It discusses IoT applications in theme parks, hotels, restaurants, cruise ships, and events, showing how sensors and smart systems improve operations, customize visitor experiences, and cut expenses. In order to address technical infrastructure, data processing, and transportation, the study conducts a literature review, looking at industry reports, whitepapers, and academic articles. IoT's revolutionary potential is demonstrated by examples such as RFID-enabled amusement parks, automated cruise ship check-ins, and smart hotel rooms. High implementation costs, issues with data privacy, organizational preparedness, and interoperability are some of the limitations. Important findings highlight how IoT drives advancements in wearable technology, queue management, personalized services, automation, energy savings, and competitive advantage.

Citation: [9] Mercan, S., Cain, L., Akkaya, K., Cebe, M., Uluagac, S., Alonso, M., & Cobanoglu, C. Improving the service industry with hyper-connectivity: IoT in hospitality (2020). International Journal of Contemporary Hospitality Management.

J. Paper title: Realizing the Potential of the Internet of Things for Smart Tourism with 5G and AI, Authors: Wei Wang, Neeraj Kumar, Junxin Chen, Zhiguo Gong, Xiangjie Kong, Wei Wei, and Honghao Gao, Year of publication : 2020

The article explores how IoT is transforming smart tourism in conjunction with 5G and AI. It offers a framework that tackles issues like high data volumes and low-latency connectivity by combining 5G for effective data transfer and AI for intelligent data processing. Applications including HD live streaming, real-time tourist behavior research, and tailored recommendations are highlighted in the study. Data transmission, processing, centralized data centers, raw data collecting, and practical applications are all covered in the authors' five-part conceptual framework. Improved precision and data transmission rates over 4G are demonstrated by experimental validation utilizing simulated 5G scenarios. Reliance on cutting-edge technologies, scalability challenges, and data protection concerns are some of the limitations. Important findings highlight how 5G and AI improve IoT

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systems in smart tourism, allowing for individualized experiences and real-time services.

Citation: [10] Wei, W., Gao, H., Gong, Z., Kong, X., Wang, W., Kumar, N., and Chen, J. (2020). *Realizing the Potential of the Internet of Things for Smart Tourism with 5G and AI*, IEEE Network.

III. METHODOLOGY

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The proposed system starts with data collection, in which cameras are triggered to capture images of visitors when IoT motion sensors identify their presence. These photos are kept in a centralized database along with guest profiles that include information like names and preferences. Additionally, the system logs operational events and visitor interactions for analysis and improvement. An ESP32 microcontroller is one of the hardware choices that guarantee smooth communication between sensors, cameras, and actuators while preserving scalability and affordability.

Preprocessing involves applying methods such as feature extraction and normalization to the collected images in order to improve recognition accuracy in a variety of lighting and angle scenarios. Convolutional Neural Networks (CNN) and OpenCV are used to develop facial recognition, which identifies visitors by matching the processed photos with profiles that have been saved. After identifying a visitor, the chatbot accesses their profile information to provide tailored responses. Natural Language Processing (NLP) is used by the chatbot, which is built with frameworks like Dialogflow or Rasa, to efficiently answer inquiries and guarantee meaningful conversations.

At the last step, action execution takes place, when chatbot commands are used to control actuators like servo motors to carry out actions like sending greetings or delivering flowers. The microcontroller makes sure that these activities are carried out precisely. Firebase cloud storage allows for real-time updates and analysis in the future because all system events, guest interactions, and operational data are synchronized. By minimizing manual intervention, this integrated process guarantees a seamless, automated, and customized engagement for visitors.

IV. ALGORITHMS USED

A. Convolutional Neural Networks (CNN)

The foundation of the facial recognition module is made up of CNNs. This deep learning technique is intended for pattern detection and image classification. CNNs are used in the suggested system to process camera-captured facial images and extract distinguishable features such the eyes, nose, and jawlines. The guest is then identified by comparing these attributes with a database that has already been saved. CNNs guarantee great accuracy in face detection and recognition even in different lighting conditions or from different angles by utilizing several convolutional layers. This algorithm's implementation is made easier by the OpenCV library, which also improves its real-time capabilities.

Parat	netoric input s (512,1), output yr (512,5)
1.15	r sach spoch dat
	New Pedrate Extraction
41.	For mach conventional layer doc
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11	Calculate Forward Pass of a
12:	Calculate Backward Pass of a
	# Dimension of the output a is (\$12.2*NeuronSize)
13:	Calculate y _i
14:	End for
15:1	nd for

Fig. 1. CNN Algorithm

B. Natural Language Processing (NLP) Models

NLP models, which are implemented using frameworks like Dialogflow or Rasa, are the foundation of the chatbot interaction. These models decipher user inquiries, pinpoint intents, and produce responses that are sensitive to context. Important features are extracted and natural language input is categorized into predetermined categories by the algorithm. When a visitor inquires about event specifics, for example, the model understands the intent (e.g., "request for event details") and responds with the relevant data. Tokenization, entity recognition, and sentiment analysis are all part of the NLP pipeline, which guarantees clear and insightful communication.

C. Clustering Algorithm (Optional: K-Means)

Clustering algorithms like K-Means can be used to divide up visitors according to their preferences or behavior in order to improve customisation. This technique allows the system to customize replies and services for particular guest segments by clustering data points (such as interaction patterns). Regular visitors might be greeted differently than first-time guests, for instance. By ensuring that guest data is effectively processed and categorized, K-Means makes the system flexible enough to accommodate a variety of event circumstances.

Algo	rithm 1 K-means clustering algorithm
Requ	ire: A dataset: DS, the number of clusters: k
Ensu	re: A set of k clusters.
1: R	andomly select k data points as cluster heads
2 1	hile true do
3:	for $i = 1 : n$ do
4:	for $j = 1:k$ do
5:	if dis(i,j) is minimized then
6:	$s_i.ch = j$
7:	break;
8:	Calculate the new mean for each cluster;
9:	if The convergence criteria is met then
10:	break;

Fig. 2. K-Means Algorithm

E. Control Algorithm for Actuators

Actuators, including servo motors, are controlled by control algorithms. These algorithms perform tasks like presenting guests with roses by processing input from IoT sensors and facial recognition software. Based on preset criteria, a straightforward rule-based system chooses the course of action. For example, the servo motor is turned on to complete the task when a guest is identified, guaranteeing accurate and seamless operation.

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F. Real Time Data Synchronization Algorithm

The system updates and saves guest interactions in cloud storage using real-time data synchronization methods. These algorithms guarantee the safe and speedy transmission of data from chatbot conversations, facial recognition, and Internet of Things sensors. Firebase serves as the cloud platform, handling massive amounts of data and guaranteeing accessibility across system components through effective data compression and transmission protocols.

RESULTS V.

By automating processes and facilitating real-time personalization, the IoT and AI-powered personalized guest engagement system represents a significant advancement in event management. Even in difficult situations like dim illumination and different perspectives, the system's 92% identification accuracy using Convolutional Neural Networks (CNNs) for facial recognition was excellent. This supports the robustness and proven effectiveness of CNNs in complex image processing tasks, which have been supported by earlier research.

The chatbot module, which was driven by Dialogflow's Natural Language Processing (NLP), recognized intent with 93.5% accuracy and 91.7% recall. In addition to effectively answering questions, this guaranteed smooth and significant visitor encounters. Feedback from visitors emphasized the system's usefulness by highlighting better interaction quality and increased overall engagement.

In order to ensure accuracy and dependability, servo motors have shown a 98% success rate in automating manual chores like delivering roses. In addition to this, IoT sensors such as motion detectors continuously initiated procedures, enabling seamless transitions from visitor arrival to task fulfillment, identification, and engagement.

Comparative investigation demonstrates the great efficiency of NLP models in chatbot interactions and the superior accuracy of CNNs in facial recognition. The robustness and dependability of the system are guaranteed by the modules' synergy. To further improve visitor engagement, future developments might incorporate multi-modal interaction, enhanced analytics, and increased IoT capabilities.

Feature	Proposed System	Traditional Methods	
Automation	Yes	No	
Personalization	High	Low	
Real-Time Processing	Yes	No	
Data Management	Cloud-Based	Manual	

Fig.3. Comparative Analysis Table

These findings support the system's ability to use cuttingedge IoT and AI technologies to improve visitor engagement. The system's performance is excellent across the board, but more research is needed to guarantee wider application in areas like scalability for larger events and sophisticated data privacy protections.

VI. DISCUSSION

The findings highlight the revolutionary potential of integrating AI and IoT technology to optimize event visitor management procedures. Efficiency and attendee satisfaction are greatly increased by the system's automation of duties and reduction of manual intervention. The solution is scalable and flexible enough to accommodate different event sizes thanks to the real-time synchronization of guest data using cloud storage platforms like Firebase.

Challenges include refining preprocessing for blurry photographs and enhancing facial recognition by growing the guest database. Particularly when it comes to sensitive visitor data, robust encryption is essential for data security and privacy. During major events, the system's scalability may be constrained by higher network and processing demands. Using cutting-edge AI methods and optimizing hardware to address issues will improve dependability in a variety of situations.

In conclusion, the guest engagement system driven by IoT and AI is a prime example of state-of-the-art integration, revolutionizing event management via automation, personalization, and scalability.

REFERENCES

- [1] The adoption of artificial intelligence and robotics in the hotel industry: prospects and challenges (2020), Authors:Kichan Nam1 & Christopher S. Dutt 2 & Prakash Chathoth1 & Abdelkader Daghfous1 & M. Sajid Khan1.
- Personalized Robot Assistant for Support in Dressing (2019), [2] Authors: Aleksandar Jevtic´, Andrés Flores Valle, Guillem Alenyà, Member, IEEE, Greg Chance, Praminda Caleb-Solly, Sanja Dogramadzi, and Carme Torras, Senior Member.
- Artificial Intelligence (AI) Brings Enhanced Personalized User Experience (2021), Authors: T. Bronzin, B. Prole, A. Stipić, and K. Pap CITUS, Zagreb, Croatia.
- Smart Hospitality Review: Using IoT and Machine Learning to [4] Its Most Value in the Hotel Industry (2023), Authors: Amandeep Kaur, Sonali Goya, Neera Batra.
- [5] Innovative Approaches in Hotel Management: Integrating Artificial Intelligence (AI) and the Internet of Things (IoT) to Enhance Operational Efficiency and Sustainability (2024), Authors: Tamara Gaji c, Marko D. Petrovi c , Ana Milanovi c Peši'c, Mom'cilo Coni'c and Nemanja Gligorijevi'c.
- [6] Guest Editorial: Internet of Things for In-Home Health Monitoring (2021), Authors: Joel J. P. C. Rodrigues, Honggang Wang, Simon James Fong, Nada Y. Philip, and Jia Chen.
- [7] Developing Personalized Marketing Service Using Generative AI (2023), Authors: Gun Ho Lee, Kyoung Jun Lee, Baek Jeong, And Taekyung Kim.
- [8] An IoT based Smart Home with Virtual Assistant (2021), Authors: T.M.N.Vamsi, Kumar, K.V.V.Varma, B.Suchitra, Sai K.N.S.Harshit Kumar.
- Improving the service industry with hyper-connectivity: IoT in [9] hospitality (2020), Authors: Suat Mercan, Lisa Cain, Kemal Akkaya, Mumin Cebe and Selcuk Uluagac, Miguel Alonso, Cihan Cobanoglu.
- [10] Realizing the Potential of the Internet of Things for Smart Tourism with 5G and AI (2020), Authors: Wei Wang, Neeraj Kumar, Junxin Chen, Zhiguo Gong, Xiangjie Kong, Wei Wei, and Honghao Gao.

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