

Effortless Event Discovery with AI

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Abstract: The challenge of discovering and planning relevant events hinders attendees and hinders organizers from maximizing their productivity and engagement. This platform addresses the problem by providing tailored event recommendations for goals and preferences of the individual. Making use of cutting-edge analytics and user behavior insights, it delivers detailed, data-driven insights to enhance decision-making. Additionally, immersive visual representations are incorporated into the platform, creating a seamless and interesting user experience for event planning and discovery. This user is given the ability to connect with the best events through the holistic solution, fostering meaningful exchanges and maximizing value for all parties involved. Attendees and organizers of relevant events frequently face difficulties in locating, connecting with, and planning with participants in this day and age of numerous events and opportunities for networking. These difficulties result in missed opportunities for growth, collaboration, and engagement. This platform aims to resolve these challenges by employing advanced algorithms for personalized recommendations that align with preferences, professional objectives, and interests. Through the integration of in-depth understanding of the event, including demographics of attendees, key highlights, and the schedule the platform equips users with critical information to make informed decisions. Additionally, immersive visualizations and intuitive navigation enhance the event discovery process, making it interactive and enjoyable. By bridging the gap between event opportunities and user needs, this platform fosters meaningful connections, efficient planning and enhanced experiences for both organizers and attendees.

Keywords: Opportunities, Relevant, Hinders, Platform, Event, Planning, Events, Attendees, Organizers, user.

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I. INTRODUCTION

Making meaningful connections between communities, event planners, and attendees is the aim of Eventus AI. The platform goes beyond event planning and discovery to become a center for bringing people together by offering chances for socialization and cooperation. Group Eventus AI promotes active engagement in conversations and interactive Q&A sessions with features like attendee matching, involvement and dedication. Participants have the chance to network with business executives, find like-minded individuals, and engage in conversations that enhance the value of the information shared at the event. Increased patronage and repeat attendance at future events can result from increased attendee engagement, which is also advantageous to organizers. Eventus AI employs multilingual support since it is aware of world events and makes sure that Eventus AI is a potent tool for both professional and personal growth in addition to being entertaining. With the users' interests and professional

objectives in mind, the site selects educational possibilities including workshops, seminars, and certification programs. By Eventus AI builds a link between events and continuing education by connecting with e-learning platforms and professional networks, helping users learn new things and broaden their expertise. By implementing stringent security measures to protect event and personal data, Eventus AI prioritizes user trust. To guarantee data integrity and confidentiality, the platform makes use of multifactor authentication, end-to-end encryption, and secure cloud storage. Safe processing of user data is ensured by adherence to international data privacy laws including the CCPA and GDPR. The road map not only saves time but also reduces the possibility of mistakes, guaranteeing that everything runs well. What distinguishes Eventus AI is its capacity to consistently adjust to new trends and changing user tastes. Instead of only providing static ideas, the software learns from each user interaction and modifies its event recommendations in real time to consider seasonal variations, new interests, and local events. Eventus AI is the

go-to resource for finding events that are most important to you since it uses deep learning models to guarantee that the recommendations are always timely, relevant, and new. Additionally, by integrating with numerous third-party services, Eventus AI offers a comprehensive experience that goes beyond conventional event discovery. From social networking sites for customized invitations to events.

II. LITERATURE SURVEY

Pedapudi Nagababu (2024) et al. [13] highlight the role of AI in revolutionizing event discovery through Emerging Technology (INCET). Their findings emphasize how AI-driven systems enhance event recommendations, streamline user engagement, and personalize event discovery. Shoibam Amritraj (2023) et al. [18] explore automated data analysis in Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI), focusing on AI-powered algorithms that refine event search and classification, making event discovery seamless and efficient.

At Advanced Computing Technologies and Applications (ICACTA), Pallavi Pandey et al. [12] discuss deep learning applications in event management. "EventEasy," a mobile application that uses Convolutional Neural Networks (CNNs) to suggest personalized events based on user preferences, is the result of their work. Vivek Kumar Singh and others (2023) et al. [10] in Computing, Communication, and Intelligent Systems (ICCCIS) propose an innovative event categorization method using clustering techniques and pattern recognition to enhance event recommendations.

Vela Chelamala Ganesh Reddy (2024) et al. [20] introduce SubCoPLeD, a deep learning- based system for smart event discovery, as presented in Advanced Computing and Communication Systems (ICACCS). Their approach enhances event searchability and optimizes user experience. Amine Mezenner (2023) et al. [1] in Advances in Electronics, Control, and Communication Systems (ICAECCS) present a novel AI-driven recommendation system using local directional patterns (LDP) to refine event suggestions.

M. Sowmya (2023) et al. [11] in Technological Advancements in Computational Sciences (ICTACS) propose a machine learning- based platform for comprehensive event management, ensuring personalized recommendations and automated scheduling. Kelothu Shivaprasad (2023) et al. [8] in Intelligent Computing and Control Systems (ICICCS) focus on deep learning techniques for improving event search accuracy and user engagement, employing CNNs to analyze user preferences and suggest relevant events.

R. Aishwarya (2023) et al. [16] in Advanced Computing and Communication Systems (ICACCS) extend AI-driven event discovery to specialized domains, such as aquatic-themed events. A hybrid strategy that combines CNNs and Local Binary Patterns (LBP) is proposed by Joju Jose Joseph (2023) et al. [7] in Emerging Research Areas: International Conference on Intelligent Systems (AICERA/ICIS) to improve event discovery accuracy and user satisfaction.

III. PROPOSED SYSTEM

This system integrates AI-driven event recommendations, user preferences, and real-time contextual data to provide a seamless event discovery experience. Generative AI (GenAI) and Machine Learning (ML) are used in conjunction to provide an intelligent, adaptable, and individualized approach to event discovery and recommendation. The system makes use of Neural Networks (NNs) to process high-dimensional event metadata, such as location, event type, and popularity trends, for the purpose of determining patterns of user interests and engagement. These models identify key patterns in user behaviour, ensuring relevant event suggestions. GenAI models dynamically generate personalized event itineraries based on preferences, past attendance, and real-time availability. Details about the event, the best times to be there, and insights into social engagement are included in these suggestions. The system is implemented with multilingual support and offline capabilities, making it accessible globally. Scalability is ensured by cloud-based processing, which effectively manages user interactions and large event databases. By integrating ML and GenAI, the proposed system delivers accurate, timely, and engaging event recommendations, enhancing user experience and social connectivity while minimizing information overload. The system continuously improves future recommendations by learning from user feedback. By incorporating real-time event tracking, the system makes it easier for users to stay engaged by giving them live updates on changes to the schedule, changes to the venue, and interactions between attendees. The application of sentiment analysis to reviews of events and discussions on social media enables the AI to assess public perception and adjust its recommendations accordingly. The system incorporates Augmented Reality (AR) features, which provide virtual previews of venues and events prior to attendance, to guarantee a personalized and immersive experience. Collaborative filtering techniques analyse similar user profiles to suggest trending or niche events that match interests. Additionally, voice-based AI assistants allow users to explore and book events using natural language queries. prevents fraudulent listings and ensures that attendees have a safe experience. The AI-powered dynamic pricing model.

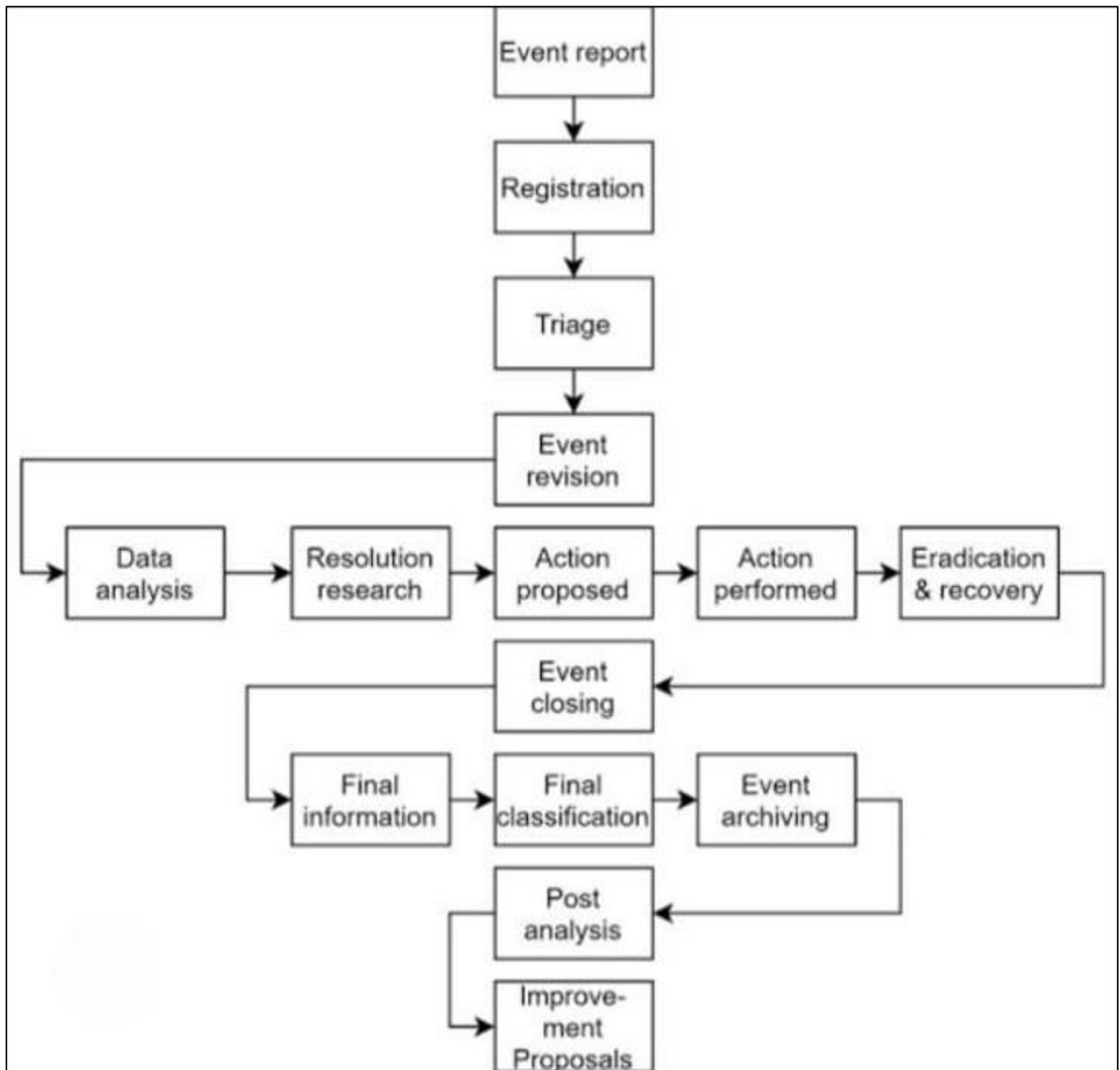


Fig 1 Flow of Eventus AI

IV. RESULT AND DISCUSSION

The outcome highlights the efficiency of AI in automating event discovery and recommendations. By analyzing user preferences, location, and event trends, the system accurately suggests relevant events. The platform provides real-time updates, enabling users, organizers, and businesses to make informed decisions about event participation. Such tools can significantly enhance engagement by facilitating early discovery and personalized event planning. The impact of the results and the system's potential utility are the main topics of discussion. Opportunities for entertainment and networking can be missed if you don't attend relevant events. Identifying suitable events at an early stage, as demonstrated here, is

crucial for planning and maximizing participation. The system enables users to explore various event categories, from conferences to social gatherings, and provides recommendations based on historical attendance and real-time availability. An AI-driven event discovery platform's output is depicted in the image that has been provided. Users can customize event suggestions by entering their preferences and location into the system. In this particular example, the system has identified an event that aligns with the user's interests, location, and availability. To ensure a seamless experience, the event details include information about the venue, the schedule, and engagement. By continuously refining recommendations, the system optimizes event discovery, making participation more accessible and engaging for a wide audience.



Fig 2 Result of Eventus AI

V. CONCLUSION

The event discovery system presented here represents a transformative tool for modern social engagement. By accurately recommending events based on user preferences, location, and interests, it highlights the potential of advanced technologies like AI to revolutionize event planning and participation. Early discovery is crucial in maximizing attendance, enhancing networking opportunities, and optimizing resource allocation, making systems like this essential for seamless event experiences. However, there are a number of factors that determine its practicality. To ensure accuracy across various event categories, user demographics, and geographic regions, the model must be continuously improved, particularly through diverse and extensive training datasets. Its dependability can be further enhanced by regular updates that consider new trends and regional variations. In addition, widespread adoption necessitates seamless integration with existing platforms, including compatibility with mobile applications, IoT devices, and decision-support systems. Additionally, these systems require user-friendly interfaces and contextual recommendations to enable users to make decisions based on relevant information. An event discovery system can play a crucial role in enhancing engagement, reducing information overload, and enhancing event accessibility by addressing these obstacles and enhancing its capabilities. It significantly contributes to a social landscape that is more connected and dynamic by laying the groundwork for better planning, increased participation, and optimized event management.

FUTURE WORKS

Eventus AI not only changes how users search for events, but it also gives event planners access to a number of effective tools that help them expedite their workflows. The platform dynamically adjusts event recommendations to user preferences using machine learning models, enabling

users to find events that align with their location, interests, and availability. These personalized suggestions are continuously improved as the system gains knowledge from user interactions and comments, making sure that ideas for events remain interesting and pertinent. Furthermore, the platform improves the timeliness and accuracy of event information by integrating data in real-time from external sources like social media and streaming services. As a result, even when tastes and trends shift, users will always be informed about new developments. By providing thorough insights into the platform stays at the forefront of event management technology thanks to Eventus AI's machine learning algorithms' constant improvement. Eventus continuously adjusts to new user preferences, trends, and event kinds. The best tools and solutions are made available to users and organizers thanks to AI. For anyone involved in event discovery and management, whether they are attending, organizing, or both, the platform is a vital resource due to its scalability, personalization, and integration with services.

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