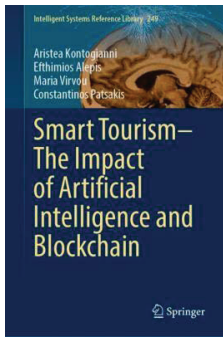


## BOOK REVIEW



### Smart Tourism–The Impact of Artificial Intelligence and Blockchain

Aristea Kontogianni, Efthimios Alepis, Maria Virvou and Constantinos Patsakis

*Smart Tourism and Emerging Technologies*, published by Springer in 2024, is a comprehensive addition to the “Intelligent Systems Reference Library” series. The book meticulously delves into the rapidly evolving domain of smart tourism, addressing the intersection of technology, tourism, and urban development. Ten chapters thoroughly analyze how contemporary technologies, particularly artificial intelligence (AI), machine learning (ML), mobile applications, and blockchain, are revolutionizing the tourism industry.

The book begins with an informative introduction that traces the origins of “smart tourism” from its conceptual inception in the late 1990s to its significant emergence in academic and industry circles a decade later. The authors have done an excellent job of synthesizing recent research, including a variety of academic papers and “grey literature,” to provide an overview of the current trends, concepts, and methodologies in smart tourism. This chapter sets the stage for a deep dive into the various technological underpinnings that form the basis of smart tourism today.

In the second chapter, the authors focus on the conceptualization of smart tourism, and examine how ubiquitous computing and context awareness have become an integral part of this field. The role of mobile devices and the data they generate is emphasized, highlighting their potential to enhance the tourist experience by providing contextual information in real time. This section is particularly insightful in showing how social media platforms, with their immense data-generating capabilities, are becoming pivotal in smart tourism research.

Chapter three shifts the focus to mobile applications in smart tourism and smart cities, and discusses the use of crowdsourcing and crowdsensing frameworks to improve the quality of life for locals and enhance the tourist experience. The practical applications of these technologies are well-articulated, with examples of how mobile apps can be used to gather and analyze data for better service delivery in both smart cities and tourist destinations. The discussion on the challenges and solutions related to implementing such systems is also noteworthy, providing a balanced perspective on the potential and pitfalls of these technologies.

The fourth chapter expands on the theme of mobile applications by exploring user modeling in smart tourism. The authors delve into the history and current state of user modeling and demonstrate how data from social networks and smartphones can be harnessed to create personalized tourist experiences. The use of semantic web technologies and multi-criteria decision-making theories to achieve this personalization is particularly well-explained and offers a glimpse into the future of user-centric smart tourism applications.


Artificial intelligence takes center stage in the fifth and sixth chapters. Here, the authors provide an overview of a wide range of AI techniques currently being applied in smart tourism, from deep neural networks to innovative frameworks such as “Moments of Interest” (MOIs). The discussion is both theoretical and practical, with detailed case studies that illustrate how AI is being used to enhance the tourist experience. The proposed frameworks for using AI to analyze user-generated images and provide personalized recommendations are especially intriguing, pointing to the potential for AI to revolutionize smart tourism. Chapter seven introduces blockchain technology and discusses its emerging role in smart tourism. The authors provide a comprehensive overview of how blockchain can be used to enhance privacy, enable smart contracts, and support cryptocurrencies within the tourism industry. This chapter is particularly timely, given the increasing interest in blockchain across various sectors, and it effectively presents the state of the art in blockchain applications for smart tourism.

The impact of the COVID-19 pandemic on the tourism industry is the focus of chapter eight. The authors examine how the pandemic has changed travelers’ behavior and decision-making, leading to new challenges and opportunities for the tourism sector. The role of technology in supporting the industry’s recovery is emphasized, with discussions on how AI, blockchain, and other emerging technologies can help navigate the post-COVID-19 landscape.

In the penultimate chapter, the authors explore open questions and future directions in the field of smart tourism. This chapter is a forward-looking analysis of the gaps and challenges that remain in the field and offers insights into potential areas for future research. Due to the dynamic nature of smart tourism and its reliance on cutting-edge technology, this chapter is an important guide for academics and practitioners alike, pointing the way to new frontiers in the industry.

The book concludes with a summary of the authors' extensive research and the formal presentation of several innovative frameworks for smart tourism. These frameworks are positioned as key contributions to the field, offering practical tools for the development of smart tourism applications and systems. The emphasis on the role of AI and blockchain throughout the book highlights the transformative potential of these technologies although the authors acknowledge that their full adoption in real-world scenarios is still a work in progress.

Overall, *Smart Tourism and Emerging Technologies* is a must-read for anyone interested in the intersection of technology and tourism. While the book might pose challenging reading experience for some people who are not tech-savvy, the authors have succeeded in providing a comprehensive, well-researched, and forward-looking analysis of smart tourism, making this book a valuable resource for academics, industry professionals, and policymakers alike. By exploring current trends and future possibilities, the book not only enhances our understanding of smart tourism but also paves the way for its continued evolution in the years to come.

 **Iva KOVAČEVIĆ, PhD student, Librarian**  
University of Rijeka  
Faculty of Tourism and Hospitality Management  
Primorska 46, P.O. Box 97, 51410 Opatija, Croatia  
E-mail address: ivak@fthm.hr

Kovačević, I. (2024). [Review of the book *Smart Tourism–The Impact of Artificial Intelligence and Blockchain*, by Aristeia Kontogianni, Efthimios Alepis, Maria Virvou and Constantinos Patsakis]. *Tourism and Hospitality Management*, 30(3), 459-460, <https://doi.org/10.20867/thm.30.3.13>