

Generative AI in the Travel Journey Track

Track Chairs

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Track Overview

In the era of smart tourism, the traveller's journey is increasingly defined by digitally mediated interactions. Within these ecosystems, Artificial Intelligence (AI) has emerged as a transformative force rather than a behind-the-scenes utility. For the modern consumer, AI acts as a core interface, learning from personal data to provide tailored recommendations, predictive insights, and seamless interactions from the initial search to journey's end.

The integration of AI into tourism fundamentally alters traveller's role and experience. While these technologies promise a more responsive and inclusive travel environment, they also reshape the consumer-provider dynamic through enhanced personalisation, reduced friction, and empowered decision-making. Yet the AI-driven transformation raises some challenges such as how data integrity and algorithmic clarity drive traveller's confidence, whether AI creates inclusive benefits or new barriers for diverse users, and balancing automated convenience with meaningful human control.

Therefore, this track seeks submissions that address the opportunities and challenges of Artificial Intelligence in Smart Tourism Ecosystems, specifically examining how these technologies are developed, implemented, governed, and experienced.

Expanded Themes and Topics

1. AI-Enabled Service Experience and Personalisation

- Generative AI across the travel journey: The role of Large Language Models (LLMs) and foundation models in autonomous itinerary co-creation, conversational inspiration, and real-time on-site assistance.
- Multimodal experience design: using GenAI to produce personalized visual inspirations, synthetic audio guides, and tailored digital storytelling for cultural attractions.
- Predictive traveller assistance: systems that anticipate user needs through pattern recognition before the user requests help.
- Automated service recovery: AI's capacity to detect friction points in real-time and initiate autonomous solutions.
- Inclusive intelligence: AI-driven tools that adapt dynamically to the accessibility and cognitive requirements of diverse travellers.

2. Consumer Behaviour and Algorithmic Interaction

- Recommender systems & choice architecture: research into how predictive algorithms influence traveller autonomy and complex decision-making processes.
- Trust in conversational agents: consumer psychological responses to the "human-like" persona of Generative AI compared to traditional, rigid recommender systems.
- Algorithmic trust & explainability: evaluating how "black box" GenAI outputs affect traveller confidence and the necessity for transparency in AI-generated advice.
- Sentiment & intent analytics: using Natural Language Processing to decode complex traveller emotions and digital word-of-mouth.
- Cross-cultural AI adoption: how global cultural variations dictate the acceptance and use of intelligent travel interfaces.

3. AI as a Strategic Organisational Capability

- AI-native business models: innovation in firms where machine learning is the primary engine of value creation.
- Prescriptive managerial analytics: moving beyond "what happened" to AI-driven "what should we do" for pricing and strategy.
- Generative AI as an Organizational Copilot: how staff leverage GenAI to automate high-volume inquiries while enhancing high-touch, personalized human service delivery.
- Strategic capability building: the logic of AI adoption, digital transformation, and change management in resource-constrained tourism firms.

4. Ecosystem Intelligence and Demand Dynamics

- AI-enabled demand forecasting: using advanced machine learning to predict volatile consumer shifts and seasonality.
- Intelligent resource coordination: real-time AI alignment of destination logistics and services with current traveller demand.
- Ecosystem orchestration: how AI platforms act as a central "intelligence hub" bridging travellers, firms, and public institutions.

5. Methodological and Theoretical Frontiers

- Computational social science: utilising digital trace data and neural networks to map and model tourism phenomena.
- Experimental AI research: novel methods (lab or field) for testing human-AI interactions and longitudinal behavioural shifts.
- Theories of machine agency: developing new frameworks that treat AI as an active, learning "actor" in the tourism system.
- Synthetic data & simulations: using Generative AI to create high-fidelity synthetic traveler datasets for modeling behavior while maintaining data privacy.