

LocalLens : Intelligent Digital Platform (IDP) for Tourism

Litesh Sonawane, Omkar Made, Yuvraj Tale, Yash Pimparkar, Apurva Pilay

Department of Computer Science & Engineering

JSPM University, Pune, India

Abstract: *The tourism industry has undergone a significant transformation due to the rapid expansion of digital technologies. This has created opportunities for intelligent platforms that improve user experience and travel planning. However, a lot of the tourism applications that are currently in use function independently, requiring travellers to use several platforms for booking services, itinerary planning, destination discovery, and communication with local guides. This disjointed approach frequently results in ineffectiveness, a lack of customization, and restricted access to genuine local experiences. This study suggests an Intelligent Digital Platform (IDP) for Tourism that combines a community-based travel ecosystem with recommendation systems powered by artificial intelligence to address these issues.*

The suggested platform offers a unified solution that uses AI-generated itineraries and tailored recommendations to help travellers plan and organize trips. To recommend appropriate locations, activities, and travel schedules, the system integrates a hybrid tourist recommendation mechanism that examines user preferences, travel interests, and contextual data. In order to promote genuine cultural experiences and encourage community-based tourism, the platform also introduces a verified local guide marketplace that connects travellers directly with reliable local guides.

The suggested platform makes travel planning easier while enhancing accessibility, safety, and personalization by fusing artificial intelligence with community involvement. The system seeks to simplify trip planning, promote eco-friendly travel, and generate jobs for nearby communities. The findings show that the efficiency and efficacy of digital tourism platforms can be greatly increased by combining AI-powered recommendation systems with contemporary web technologies.

Keywords: *tourism industry*

