A VIRTUAL JOURNEY FROM TRADITIONAL TO DIGITAL IN THE CULTURAL HERITAGE EXPERIENCE: THE CASE OF KAYAŞEHİR

Project Leader

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This study is conducted within the scope of the DKMP24-6 Specialization Project.

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" THE AIM OF THE PROJECT "

Conduct 3D laser scanning of the elements surrounding Kayaşehir,

Capture aerial images of the surrounding elements using UAV technology,

Perform thermal camera imaging of the surrounding elements,

Carry out ground-penetrating radar (GPR) measurements of the surrounding elements,

Digitize the surrounding elements and create 3D models,

Develop Kayaşehir to a level where it can be integrated into virtual reality applications,

Assess the effectiveness and quality of experience of the virtual Kayaşehir model, test its functionality, and provide recommendations to relevant stakeholders.

" THE SIGNIFICANCE OF THE PROJECT "

A cultural heritage site in the Cappadocia region, which has not been previously studied or included in the scope of tourism, will be digitally transferred in all its aspects using scientific and technological methods. These efforts will significantly contribute to the introduction of a new destination area in the region. Through the digital documentation planned within the project, it will be possible to experience the site in detail within virtual reality environments and to explore Kayaşehir virtually. This will provide an opportunity for disadvantaged individuals or groups who cannot physically access the site to experience the area through a virtual reality room at the site entrance. Additionally, the site will be accessible remotely through virtual museum applications via computer or VR headsets.

In addition to these benefits, the digital measurement and documentation studies to be carried out at Kayaşehir will enable the assessment of the site's current state of preservation, damage detection and analysis, necessary conservation and restoration interventions, as well as the development of site management, visitor planning, and sustainable conservation and tourism circulation strategies. Although there are similar national and international projects, the "A VIRTUAL JOURNEY FROM TRADITIONAL TO DIGITAL IN THE CULTURAL HERITAGE EXPERIENCE: THE CASE OF KAYAŞEHİR" project stands out as a unique initiative by unveiling the tourism potential of the site, offering virtual exploration opportunities, and being the first application of its kind in the Cappadocia region. Furthermore, by digitally recording all scientific infrastructure data, the project will play a critical role in preserving Kayaşehir and transferring it to future generations in a sustainable manner.

The digitalization of Kayaşehir represents a significant step in both the preservation and promotion of this valuable heritage. The significance and originality of the project can be categorized under several key aspects.