

9th International Conference on Research in HUMANITIES AND SOCIAL SCIENCES

12 - 14 December 2024 Cambridge, United Kingdom

Application Of Artificial Intelligence in The Digital Protection and Inheritance of Intangible Cultural Heritage

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Abstract

Intangible cultural heritage (ICH), which is regarded as a treasure of human civilization, is loaded with abundant historical, cultural and ethnic memories. Since globalization is accelerating and the modernization process is moving forward, a great number of ICH are in danger of vanishing. For the purpose of effectively protecting and inheriting these invaluable resources, artificial intelligence (AI) technology has been gradually introduced into the digital protection and inheritance of intangible cultural heritage. This article first presents the current situation regarding the protection and inheritance of ICH, and then expounds in detail on the specific application methods of AI in the digital protection and inheritance of ICH, such as data collection and processing, intelligent classification and identification, virtual restoration and reproduction, etc. Subsequently, through experimental investigations, this article analyzes the actual effects and potential values of AI technology in the protection and inheritance of ICH. The experimental results indicate that artificial intelligence technology can remarkably enhance the efficiency and accuracy of the protection and inheritance of intangible cultural heritage, with the accuracy rate varying from 85% to 92%, which offers new motivation for the sustainable development of ICH.

Keywords: Intangible Cultural Heritage; Artificial Intelligence; Digital Protection; Cultural Inheritance