

Call for Proposals

The application of Artificial Intelligence (AI) in Cultural Heritage

NRF001/2025

The National Research Fund (NRF) is pleased to announce a call for proposals on "AI in cultural heritage: The integration of AI into the conservation of cultural heritage in Kenya."

1. Background

Kenya boasts a rich and diverse cultural heritage, but it faces threats from modernization, globalization, and societal shifts. Languages are fading, traditions are eroded, and historical artefacts are at risk. Al offers a promising avenue to safeguard and promote this heritage.

The NRF Kenya Call on Artificial Intelligence for Cultural Heritage (KAICH) invites submissions from researchers, professionals, and practitioners interested in advancing the use of AI in cultural heritage conservation. This call seeks to promote interdisciplinary research on both tangible and intangible heritage, utilizing AI models, tools, and methodologies for conservation, study, and broader public access to cultural heritage (CH). In addition to exploring the technical applications, the call will focus on ethical and sustainability issues, fostering a dialogue that includes diverse stakeholder perspectives to create inclusive CH practices. The call seeks proposals that will encourage knowledge-sharing and the exchange of best practices among the cultural heritage and the computing community, with the aim of building synergies with related initiatives. NRF welcomes proposals contributing to the national growth of AI applications in cultural heritage.

2. Specific Challenge

Kenya's cultural heritage faces multiple challenges that threaten its existence. These challenges entail conservation, preservation and access to CH. Modernization and globalization are causing the gradual disappearance of traditional practices, languages, and knowledge systems, particularly among younger generations, who lack captivating and interactive cultural content to engage with. This call is expected to address the following specific challenges:

- a) Many aspects of Kenya's CH, including local languages, rituals, and folklore, have not been systematically documented, putting them at risk of being lost.
- b) While AI technologies hold great potential for digitizing and preserving cultural heritage, their application in this context remains unexplored at scale.
- c) There is limited research that combines expertise from fields like linguistics, history, anthropology, and sociology that leverage AI applications for CH.
- d) The use of AI in cultural preservation raises ethical concerns related to intellectual property, cultural ownership, and responsible data usage, which need to be addressed.
- e) Efforts to preserve and promote CH must also focus on increasing public engagement and ensuring that cultural knowledge is accessible to communities and future generations.

While AI technologies hold immense potential to address these challenges, a significant gap remains in the application of AI in the CH sector. This call for proposals will support innovative, collaborative projects that specifically address the above challenges, leveraging AI to document, preserve, and promote Kenya's cultural heritage while fostering accessibility and community engagement for sustainable impact.

3. Objectives

The application of AI in CH preservation and management remains largely unexplored. In the spirit of embracing AI as a tool in CH preservation, this call aims at the following objectives:

- a) Leverage AI research to document and preserve cultural heritage through language processing, digital archiving, and storytelling.
- b) Encourage collaboration between diverse experts to address the complexities of CH preservation.

- c) Enhance research on Kenyan languages, traditions, and oral histories to contribute to global knowledge and inform preservation strategies.
- d) Promote the development of scalable, ethical AI tools for cultural data (language preservation models, digital reconstructions).
- e) Use AI to generate research insights that integrate cultural heritage into national policies, education, and economic strategies.
- f) Address ethical concerns in cultural preservation (Indigenous knowledge, intellectual property, community consent).
- g) Develop sustainable research frameworks to assess AI's long-term impact on cultural heritage.

This call will consider applications whose leverage and focus are on the objectives outlined above.

4. Scope

This call seeks innovative proposals that integrate AI with cultural Heritage expertise to address critical challenges and unlock new opportunities in the cultural domain. The focus is on fostering interdisciplinary approaches that combine technology with cultural preservation and advancement. The scope of the call is limited to the following areas:

- a) Language Preservation: Applications should explore how AI can be utilized to document, analyze, and revitalize endangered languages using advanced tools, ensuring their longevity for future generations.
- b) **Cultural Documentation and Digital Archiving:** Focus on the application of AI for the digitization, management, and preservation of cultural artifacts, traditions, and knowledge in a way that is both sustainable and accessible.
- c) **Oral Histories and Storytelling:** Investigate AI's potential to transform the collection, transcription, and dissemination of oral traditions, folktales, and community histories while maintaining their authenticity and cultural significance.
- d) **Ethical and Cultural Sensitivity:** Applicants are encouraged to address the ethical and cultural considerations of using AI, ensuring technologies respect cultural contexts, minimize biases, and comply with ethical standards.
- e) **Cultural Education and Public Engagement:** Explore how AI can create innovative platforms that enhance cultural awareness, foster heritage appreciation, and provide inclusive learning opportunities.

- f) **Economic and Policy Research:** Analyzes the economic impact of AI within cultural sectors, examining its potential to shape policy and contribute to the development of sustainable cultural industries.
- g) **Intellectual Property Rights Management:** Al's role in the management of intellectual property in the cultural sector, suggesting strategies that balance innovation with the protection and ownership of cultural IP.

This call invites innovative, practical applications that use cutting-edge AI technologies to contribute to the preservation and advancement of cultural heritage within the scope stipulated above. Collaborative, interdisciplinary approaches are highly encouraged.

5. Expected Outcomes

The following are the expected outcomes:

- 1. Advancement in Cultural Heritage Preservation: More efficient and sustainable methods for the documentation, digitization, and preservation of cultural artifacts, languages, and traditions, ensuring long-term access to cultural heritage.
- 2. Language Preservation Innovation: AI tools specifically designed for the preservation and revitalization of endangered languages, helping to safeguard linguistic diversity for future generations.
- 3. **Cultural Policy and Education Insights:** Valuable insights to inform cultural policy-making and educational frameworks, guiding decisions related to heritage management and preservation.
- 4. Ethical and Responsible AI Frameworks: AI applications in cultural heritage that ensure technologies are ethically deployed, respect cultural contexts, minimize biases, and uphold high standards of responsibility.
- 5. **Community Engagement and Empowerment:** Inclusive and culturally sensitive approaches to AI in cultural heritage encourage active participation from local communities in shaping the future of their heritage preservation.

6. Eligibility Criteria

The NRF is committed to promoting Multidisciplinary, Multi-institutional research partnerships between public institutions, researchers and the private sector.

Research teams are encouraged to submit proposals that will lead to collaborative research projects to enhance the uptake of the potential interventions.

The proposals to be submitted must consider the following:

- i. Applicants must have wide knowledge and experience in the fields of AI and CH.
- ii. Applicants must demonstrate competence and experience in their grant application areas.
- iii. The Principal Investigator must be **a Kenyan citizen**.
- iv. Non-Kenyans may apply under a Kenyan Principal Investigator or as it may be provided for in a specific agreement.
- v. All applicants must be affiliated with a recognized Kenyan research institution and not be on extended unpaid leave.
- vi. Partnering and collaborative institutions or corporate entities must formally indicate a willingness to release staff involved in the project, have the facilities implement the project, or indicate how the facilities will be availed.
- vii. No funds will be provided for the preparation of applications, a concept paper, or the full proposal.
- viii. The grants awarded are not transferable to any other person or institution.
- ix. Proposals **must be endorsed by the Chief Executive Officer** of the applicant institutions. Where the PI is the CEO, the endorsement can be given by the supervising officer.
- x. The proposed budgets shall not exceed the advertised limits as stipulated in the call documents.
- xi. Proposals on research areas requiring ethical clearance must be obtained prior to funding.
- xii. At the time of submitting the application, the Principal Investigator must hold **a minimum of a master's degree** or equivalent qualification, with a verifiable track record documented clearly in the CV.
- 7. Project Budget, Duration, and Eligible Expenditures
- The budget available for this call is **KES. 15 million**. Five projects will be funded, up to a maximum of **KES. 3 million**.

- The grant duration is **one year** with a possibility of a no-cost extension based on progress.
- Allowable costs include:
 - Supplies, services, and equipment specific to the project.
 - Cultural research, AI development, community engagement, and educational outreach activities.
 - Travel, accommodation, and subsistence expenses for data collection (maximum 25% of the total grant).
 - Costs related to organizing seminars and workshops within the project.
 - Research management costs (maximum 7.5% of the total grant).

8. Structure & Contents of the Proposal

The proposal must be structured according to the official application template. The template can be downloaded from <u>www.nrf.go.ke</u>. All headings should appear in their stated order as outlined in the template. The information must be provided for all the headings and no additional headings shall be added. It is essential that the application is clear and focused.

The proposal must also demonstrate the following:

- A clear research question or hypothesis that combines cultural research with the application of AI.
- A detailed methodology outlining the roles of cultural experts and Al specialists.
- Expected outcomes that show how the project will contribute to the preservation and dissemination of Kenya's cultural heritage.

9. Application and Review Process

a) Application process:

All applications for this call **must be submitted by 14th March 2025.** Applications can only be made using the official application template. Applications should be submitted to NRF through <u>grants@nrf.go.ke</u>.

b) Review process:

During the review of eligible proposals, the following will be evaluated:

• Relevance of proposed research.

- Feasibility.
- The potential impact of the proposed research.
- Suitability of the proposed research design and methodology.
- Technical capacity of the research team.
- Inclusivity.
- Sustainability of the project.

10. Reporting

- i. Every funded researcher will report implementation progress every three months upon commencement of the project and in accordance with the monitoring framework contained in the application form. Submission of quarterly progress reports will be required from the successful applicant.
- ii. At the completion of the project, a final report using a template to be provided by the NRF will be used to submit the report.
- iii. A full account of all expenses made for a research project shall be due within 30 days of the termination of the grant.
- iv. Unexpended funds remaining at the end of the grant must be returned to NRF.

