## 12th International Conference on New Findings in **Humanities and Social Sciences**



Oxford, United Kingdom

## Bridging the Past with Artificial Intelligence: A Unified Retrieval (UniRetrieve) Approach for **Historical Text Generation**

Prince Yaw Gharbin

University of Luxembourg

## **Abstract**

Advancements in artificial intelligence have opened new pathways for engaging with the past, prompting compelling questions: Can we meaningfully interact with veterans of the First World War through AI? If so, what new insights might these interactions reveal? Despite the promise of generative models like ChatGPT, these systems often produce fictitious or historically inaccurate responses, particularly when handling sensitive archival content. To address these limitations, we introduce UniRetrieve, a unified document and text retrieval system designed as the foundational module for a larger chatbot framework called AMA1. This system integrates four retrieval-augmented generation (RAG) pipelines to search through archival letters and diaries from World War I, anchoring AI-generated outputs in authentic, historically accurate source material. This study investigates how UniRetrieve contextualises historical narratives, reduces factual hallucinations, and retains the linguistic characteristics of original texts. We also address challenges such as maintaining historical integrity and improving the consistency of AI-generated responses. Our findings demonstrate that UniRetrieve significantly enhances the reliability and accuracy of AI-assisted historical storytelling by combining modern natural language processing with archival-grounded retrieval mechanisms. The approach offers a novel means of honouring historical memory through contemporary tools.

**Keywords:** Generative AI, Historical Text Retrieval, RAG, digital humanities, NLP