MARIE SKŁODOWSKA-CURIE ACTIONS (MSCA) POSTDOCTORAL FELLOWSHIPS 2026
APPLICATIONS AT THE UNIVERSITY OF MACERATA

SUPERVISOR PROFILE

Name of Supervisor: Tiberio Uricchio, PhD

Email: tiberio.uricchio@unimc.it

Department at University of Macerata: Humanities

Personal Webpage: www.tiberiouricchio.com

Research themes proposed:

- **AI for Digital Humanities -** Digital humanities encompass a broad range of academic activities at the intersection of computing and the disciplines of the humanities. The advent of digital technology has revolutionized the way humanistic data is analyzed, preserved, and disseminated. Among these technologies, the recent advancements in AI and machine learning are promising technologies that could enable more sophisticated analyses of text and visual media, including textual deep semantic analysis, 3D reconstructions of historical sites and deep semantic analyses of film and art. In this research theme, we especially consider the recently introduced Multimodality and Large Language Models (e.g. ChatGPT, LLaMA), that enable groundbreaking analysis of textual and image information. Combined with similarly transformer-based architecture and the recent Stable Diffusion, they enable novel way to generate and model art history, literature, cultural studies, and history. Collaborations between computer scientists and humanities scholars are crucial in driving these advancements.

- **AI for Digital Archives and Content Retrieval -** In the digital age, archives and content repositories have grown exponentially, presenting both opportunities and challenges in information retrieval and management. A significant trend in this domain is the use of AI for efficient indexing, searching, and retrieval of digital archives, which includes a wide range of applications from historical records to multimedia content. AI technologies like Large Language Models, multimodal representations like CLIP, and vector search, can be applied not just for content retrieval but also for enhancing retrieval experiences and AI literacy. In this research theme, we consider multilingual retrieval models as statistical translation methods to improve retrieval effectiveness across different languages. Additional query formulation, like combining text with media, can enable new composed and conditional retrieval, with the aim of considering the user intent into the research. Considering that historical content that may be corrupted, ancient or simply damaged by the passing of time, we also consider generative AI as a mean to semantically analyze content, restore media from the damage or even provide hypothesis (i.e. AI dream) of the missing content.

Other Info
Personal university page: https://docenti.unimc.it/tiberio.uricchio?set_language=en&cl=en