

New Media, Social Networks and the Genetic Revolution: AI and IA at Ancestry and MyHeritage

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Abstract

The development of new media and genetic research has led to the emergence of globally popular genetic and genealogy services such as Ancestry (based in the US) and MyHeritage (based in Israel). They combine the most important features of new media, such as digital formats, interactivity, multimedia, global reach, automation, etc., as well as the features of social media, as they enable users to create and share content and participate in social networks. They are also excellent examples of websites where the combination of artificial intelligence and information architecture is particularly important for users. The world's largest services of this type, discussed here, utilize AI to process genetic information to provide users with information such as their estimated ethnicity, genetic characteristics, and to find matches (genetic connections between users of a given service). They also allow, for example, to "revive" ancestors from old photos. Information architecture, however, is particularly important in data retrieval and search, including searching for ancestors or relatives in the vast genealogical databases available on both sites. This paper will therefore characterize the operation of artificial intelligence and the main components of information architecture in the analyzed sites, focusing on four systems: organizing, labeling, navigation, and searching. A comparative analysis of these sites was conducted in terms of their AI use, and a qualitative and heuristic assessment of the information architecture was applied.

Keywords: New media, Artificial Intelligence (AI), Information Architecture (IA), Ancestry, MyHeritage