



IRSTI 03.81.99  
Scientific article

DOI: <https://doi.org/10.32523/2616-7255-2024-148-3-36-55>

## Digital History in Central Asia: Initiatives, Regional Specifics and Community

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**Annotation:** This paper explores the development of digital history initiatives in Central Asia, focusing on Kazakhstan, Kyrgyzstan, and Uzbekistan. It examines the challenges, opportunities, and trends within digital humanities in the region, emphasizing the importance of incorporating postcolonial perspectives and practical digital methods for research and cultural heritage preservation. The study employs a mixed-methods approach, including literature reviews, interviews, surveys, site visits, and case studies to provide a comprehensive analysis of current digital history projects. Despite the growth of digital humanities in Central Asia, the paper identifies obstacles such as underrepresentation in international forums, limited research infrastructures, and the prevalence of Western or Russian viewpoints. Significant attention is paid to the development of the digital history community in Central Asia and the study of its needs. The article highlights the potential of digital humanities to decolonize historical narratives and enhance cultural heritage preservation through innovative means like 3D technologies. It concludes by emphasizing the importance of developing region-specific frameworks and fostering collaboration to advance digital history in Central Asia.

**Key words:** digital humanities; digital history; 3D modelling of cultural heritage; community building.

Received 10.07.2024. Revised 31.07.2024. Accepted 25.08.2024. Available online 30.09.2024

### For citation:

Gagarina D. Digital History in Central Asia: Initiatives, Regional Specifics and Community // Bulletin of the L. Gumilyov ENU Series: Historical Sciences. Philosophy. Religious studies. – 2024. – Vol. 148. – No. 3. – P. 36-55. DOI: <https://doi.org/10.32523/2616-7255-2024-148-3-36-55>

### Для цитирования:

Гагарина Д. Цифровая история в Центральной Азии: инициативы, региональная специфика и сообщество // Вестник Евразийского национального университета имени Л.Н. Гумилева. Серия: Исторические науки. Философия. Религиоведение – 2024. – Т. 148. – No.3. – С. 36-55. DOI: <https://doi.org/10.32523/2616-7255-2024-148-3-36-55>

## **Introduction**

The adoption of digital tools in historical research in Central Asia has seen a rapid evolution over the past decade. Early efforts focused on quantitative methods in historical research, the digitization of archival materials, ensuring the preservation of invaluable historical documents. Over time, these efforts have expanded to include sophisticated digital platforms that allow for the analysis, visualization, and interactive exploration of historical data.

The primary goal of the research is analysis of the current state and development prospects of digital history and digital humanities initiatives in Central Asia. The research is focused on analysing the current state of digital humanities and digital history projects in Central Asia, identifying of the tools and methodologies being used, understanding the role of community involvement in the success and sustainability of digital history initiatives, identification key challenges and obstacles to the development of digital history in Central Asia, understanding the role of community involvement in the success and sustainability of digital history initiatives, exploring the potential for developing region-specific digital humanities frameworks in Central Asia, considering local needs and cultural contexts.

This article presents the first results of a large-scale project to study digital history in Central Asia carried out by the Chair of Modern and Eastern European History, Friedrich Alexander University Erlangen-Nuremberg with joint partner institutions in Kazakhstan, Kyrgyzstan and Uzbekistan.

## **Design, methods, and limitations of the study**

This research adopts a mixed-methods approach, combining qualitative and quantitative methods to provide a comprehensive analysis of digital history initiatives in Central Asia. The study is divided into several phases, each focusing on different aspects of the research objectives. This approach allows for a detailed exploration of the current state, methodologies, community involvement, and challenges associated with digital history projects in the region.

The study includes the following phases and methods (some phases of the study are still under development at the time of preparation of the publication):

1. Literature and documents review to gather existing information about digital history initiatives in Central Asia. Collection and structuring of data on existing digital history projects and initiatives, as well as practitioners and stakeholders in the region.

2. Interviews, surveys and questionnaires to project managers, researchers, digital archivists, technologists, community leaders, and other participants involved in digital history and digital humanities initiatives to obtain qualitative insights into the successes, challenges, and impact of digital history projects.

3. Site visits to key digital history projects in Kazakhstan, Kyrgyzstan, and Uzbekistan to conduct on-the-ground assessments and direct observations of project operations and activities.

4. Case studies to provide in-depth analysis and detailed understanding of selected digital history projects.

5. Community engagement, organizing events, projects presentations and group discussions with historians and digital humanities practitioners from Central Asia.

A notable limitation of this work is its focus on three Central Asian countries: Kazakhstan, Kyrgyzstan, and Uzbekistan. This scope was chosen for two primary reasons. Firstly, these three countries demonstrate a relatively advanced level of development in digital history, making them particularly interesting subjects for analysis. Their progress in this field offers rich material for examination, including innovative projects, institutional initiatives, and emerging methodologies that are shaping the landscape of digital historical research in the region. Secondly, there is significantly more accessible information and documented activity regarding digital history initiatives in these countries compared to the other two Central Asian countries, Tajikistan and Turkmenistan. The greater availability of data and case studies from Kazakhstan, Kyrgyzstan, and Uzbekistan allows for a more comprehensive and detailed analysis of digital history practices and developments.

While this focus provides a solid foundation for understanding the state of digital history in a significant part of Central Asia, it's important to acknowledge that this approach does not capture the complete picture of digital history across the entire region. The exclusion of Tajikistan and Turkmenistan from this study means that potentially unique aspects of digital history development in these countries are not represented.

### **Digital humanities in Central Asia: challenges, opportunities, and trends**

The development of digital humanities (and digital history as a part) in Europe, the United States, Australia, and Canada has reached a high level today. Digital humanities centres have been established in numerous universities<sup>1</sup>, specialized journals are being published (including Digital Humanities Quarterly (DHQ), Digital Scholarship in the Humanities (DSH), Digital Studies / Le champ numérique, Journal of Digital Humanities (JDH), and International Journal of Humanities and Arts Computing), specialized conferences are held regularly, and a lot of educational programs are functioning<sup>2</sup>. Professional associations play a significant role in the development of digital humanities within the international academic landscape. Many of these associations are united under the “Alliance of Digital Humanities Organizations” (ADHO)<sup>3</sup>, which includes 11 national and supranational associations. These professional communities have been organizing conferences, educational events, and other activities for many years.

In terms of listed above criteria, the development of digital humanities in Central Asian countries lags Western countries.

Research within the broad framework of digital humanities, and particularly methodological research and similar projects in Central Asia, also remains limited. This specific reflects both the emerging state of digital humanities in the region and the challenges faced by researchers in this field. The project “Digital humanities in the Republic of Kazakhstan: Local solutions for global problems”<sup>4</sup> (2020-2023), supported by the European Union's “Jean Monnet Erasmus +” program, represents a significant example of such kind of projects. Led by Laura Turarbekova from Al-Farabi Kazakh National University, this initiative has implemented a comprehensive

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<sup>1</sup> centerNet, <https://dhcenternet.org>.

<sup>2</sup> Digital Humanities Course Registry, <https://dhcr.clarin-dariah.eu>.

<sup>3</sup> Alliance of Digital Humanities Organizations (ADHO), <https://adho.org>.

<sup>4</sup> Digital humanities in the Republic of Kazakhstan: local solutions for global problems, <https://dthinkz.wordpress.com>.

research and educational program to develop and promote digital humanities in the country. During the project a thematic winter schools was organised, and a series of open educational materials was created. A notable aspect of this project is its implementation within the philosophy department, framing digital humanities through the lens of digital philosophy and ethics. This unique perspective has led to specialized publications in these areas, offering a contribution to digital humanities, emphasizing ethical considerations and philosophical implications of digital technologies (Taranto, Di Liberti, Motta, 2021; Bekenova, Mürsepp, Nuryseva, Turarbekova, 2022).

In our opinion, an important conceptual and methodological aspect of the digital humanities in Central Asia is the postcolonial frame. The framework of postcolonial digital humanities challenges traditional power dynamics and colonial biases inherent in historical narratives and academic discourse (Risam, 2018). This perspective is particularly relevant given the region's complex history of Russian imperialism and Soviet influence. The field of postcolonial digital humanities in Central Asia emerges as a critical approach to decolonizing knowledge through digital means. The application of this framework raises important questions about how digital tools can be used to address the legacies of imperialism and Soviet policies in Central Asian scholarship. By adopting this lens, digital humanities projects in Central Asia have the potential to contribute significantly to the broader decolonization of knowledge and the reimagining of historical narratives in the region (Gagarina, 2024; Gagarina, Florin, 2024).

While Central Asia may not have the same institutional infrastructure and formal recognition of digital humanities as a distinct field, there is nonetheless significant activity in applying digital methods to humanities research. Universities and researchers across the region are engaging in projects that utilize computational techniques for historical, literary, and cultural studies. Thus, additionally to digital philosophy mentioned above we can highlight the development of computational linguistics in the region, such teams work in Nazarbayev University in Astana, Kazakhstan, the Mirzo Ulugbek National University of Uzbekistan (Abdurakhmonova, Ismailov, Mengliev, 2022; Abdurakhmonova, Ismailov, Sayfulleyeva, 2022), and other universities. This overview highlights several significant corpus linguistics projects focused on Central Asian languages, particularly Uzbek and Kazakh. Thus, the "O'zbek tili korpusi"<sup>5</sup> project aims to create an electronic corpus of the Uzbek language and includes linguistic dictionaries, a morphological database of Uzbek, texts from various genres (scientific, official, literary, and oral), parallel corpora of Uzbek-English and Uzbek-Russian, and associated software for managing and utilizing these resources. Andrei Filchenko and his team is working on a multimedia corpus of modern spoken Kazakh, which includes conversational material and research infrastructure for studying the Kazakh language; the project includes speech recordings, intended for phonetic, morphological, and syntactic analysis (Filchenko, Goodman, Sarseke, Assylbekov, no date). Similarly, cultural institutions in Central Asian countries are increasingly adopting digital technologies for preservation, analysis, and dissemination of cultural heritage.

This situation suggests that while the formal structures of digital humanities (such as dedicated centres, journals, and degree programs) may be less developed in Central Asia compared to Western countries, the practical application of digital methods in humanities research and cultural preservation is ongoing and evolving. The challenge for the region may lie

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<sup>5</sup> O'zbek tili korpusi, <https://uzbekcorpus.uz>.

more in establishing formal recognition and support structures for these activities, rather than in the activities themselves.

We can also state that digital humanities projects and researchers from Central Asia are underrepresented in the international digital humanities arena. Researchers from this region are notably absent from international conferences organized by the Alliance of Digital Humanities Organizations (ADHO) and other significant international events. This underrepresentation seems to stem from two main factors: the general predominance of the Global North in digital humanities and straightforward economic constraints. The dominance of Western institutions and perspectives in the field of digital humanities has been a subject of ongoing discussion and critique regardless of Central Asia in relation to the wider geographical framework (Clavert, 2013; Risam, 2018; Spiro, 2012; Eichmann, Weingart, 2015). Economic factors also play a significant role in this underrepresentation. The costs associated with attending international conferences, including travel, accommodation, and registration fees, can be prohibitive for many scholars from Central Asian institutions.

However, it is important to note that we are witnessing an increase in the visibility of Central Asian digital humanities projects in the international sphere. A notable example of this growing recognition is the nomination of Central Asian projects in the Digital Humanities Awards 2023<sup>6</sup>, what happened for the first-time last year in the history of this award. Following projects were presented at the competition: Raqamli Tarix<sup>7</sup> and Digital History Lab<sup>8</sup> from Uzbekistan; Virtual laboratory of visual anthropology<sup>9</sup> from Kazakhstan.

Another crucial factor in the coordinated development of digital humanities is research infrastructures, which establish rules and recommendations for working with digital humanities data. In Europe, examples of such infrastructures include CLARIN-ERIC<sup>10</sup> and DARIAH-EU<sup>11</sup>. These structures provide guidelines, tools, and platforms for digital humanities research, fostering standardization and collaboration across institutions and countries. Similar structures and communities dedicated to digital humanities research are currently absent in Central Asian countries. This lack of formal organizational frameworks and research infrastructures specific to digital humanities in Central Asia presents both a challenge and an opportunity for the region. The absence of such structures means that researchers in Central Asia may face difficulties in standardizing practices and methodologies, sharing resources and tools efficiently, collaborating on large-scale projects, accessing specialized training and education in digital humanities, representing regional interests and perspectives in global digital humanities discussions. On the other hand, this situation also provides an opportunity for Central Asian scholars and institutions to develop frameworks and infrastructures that are tailored to the specific needs and contexts of the region. As the field of digital humanities continues to grow in Central Asia,

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<sup>6</sup> Digital Humanities Awards, <http://dhawards.org>.

<sup>7</sup> Raqamli Tarix, <https://raqamlitarix.uz>.

<sup>8</sup> Digital History Lab, <https://dighistlab.mydurable.com>.

<sup>9</sup> Virtual laboratory of visual anthropology, <https://virtualanthropologylab.kz/english>.

<sup>10</sup> CLARIN-ERIC, <https://www.clarin.eu>.

<sup>11</sup> DARIAH-EU, <https://www.dariah.eu>.

the establishment of regional professional associations and research infrastructures could play a crucial role in advancing the field, fostering collaboration, and ensuring that Central Asian perspectives are represented in global digital humanities discourse.

### **Digital history in Central Asia: development, thematic and technological specifics**

Digital history, a subset of the broader digital humanities field, involves the application of computational tools and methods to historical research. A set of digital tools provides enhanced ways to interact with historical data, inviting both researchers and the public to engage with history through innovative means.

In Kazakhstan, Kyrgyzstan, and Uzbekistan, various projects in digital history, are being conducted by researchers, universities, and GLAM (Galleries, Libraries, Archives, Museums) institutions. These initiatives reflect the growing interest and investment in digital approaches to historical research in the region.

Earlier historiographical attempts to analyse the development of digital history, or “historical information science” as it is commonly referred to in Central Asia, have predominantly focused on individual countries rather than the region as a whole. Such country-specific analysis in deferent stages of the field development is made for Kazakhstan by Saule Zhakishева (Жакишева, 2011), for Kyrgyzstan by Shayyrkul Batyrbaeva (Батырбаева, Щербакoва, Зайнулин, Плоских, 2011), for Uzbekistan by Zamira Ishankhodzhaeva and Iroda Shamsieva (Ишанходжаева, Тагаев, 2022; Шамсиева, 2006).

The strong connection to Russian scholarship among digital history researchers in Central Asia is a significant factor shaping the field's development. This connection is largely facilitated and maintained by the professional association “History and Computer”<sup>12</sup>, which operates across several post-Soviet countries and includes a few scholars from Central Asia. The influence of this association extends beyond networking and collaboration; it has played a role in shaping the terminology and methodological approaches used in the region. We suppose that the prevalence of terms like “historical computer science” (“историческая информатика”) in Kazakhstan and Kyrgyzstan, rather than “digital history,” is a direct result of this Russian academic influence. This terminological preference reflects not just a linguistic choice but also indicates the conceptual frameworks and methodological approaches that are dominant in the field (Батырбаева, 2019; Жакишева, 2020).

It's noteworthy that many of the reviews and analyses of the digital history landscape in Central Asia have been published within the framework of publications associated with the “History and Computer” association. These publications, often in Russian, and concentration of scholarly discourse within a specific academic network has both advantages and limitations. On the positive side, this approach provides a consistent platform for scholars from different Central Asian countries to share their work and insights. It facilitates the maintenance of common methodological approaches and standards across the region, allowing for easier comparison and analysis of developments across different post-Soviet countries. This consistency has helped in establishing a cohesive regional dialogue on digital history.

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<sup>12</sup> Ассоциация "История и компьютер", <https://aik-hisc.ru>.

However, this concentration also presents certain limitations. It may restrict exposure to alternative approaches and terminologies used in the broader international digital history community. There's a potential risk of slowing down the development of country-specific or region-specific methodologies that might be more appropriate for Central Asian historical contexts. Furthermore, it might hinder integration with global digital humanities networks that operate primarily in English or use different conceptual frameworks. This situation reflects the complex balance between maintaining regional academic traditions and engaging with global trends in digital history. While the "History and Computer" association has played a significant role in fostering digital history in Central Asia, there's a growing need to diversify platforms and perspectives to fully realize the potential of digital history in the region and to connect more robustly with the global digital humanities community.

Within the framework of digital history and digital humanities, significant attention is traditionally given to the digitization and use of digital technologies for the preservation and presentation of historical and cultural heritage. In this aspect, Central Asia, has been making notable progress. Numerous initiatives have been launched to digitize historical archives, create virtual tours for museums, and develop 3D models of cultural heritage. These efforts not only contribute to the preservation of the region's history but also make it more accessible to both researchers all over the world and the public.

The use of 3D technologies has gained significant popularity in digital heritage projects across Central Asia.

Several studies explore the digitalization of historical and cultural heritage in Kazakhstan using 3D technologies like laser scanning and photogrammetry. Thus, the research by Mukhamadeyeva et al. aims to build a database of digitized cultural and historical artifacts for preservation and accessibility, showcasing the intersection of technology and heritage preservation (Mukhamadeyeva, Kusainova, Mukhamadeyeva, Yenglissova, Zhaksybaeva, 2023). In the realm of archive digitization, significant progress can also be observed in Kazakhstan, particularly in the Archive of the President of the Republic of Kazakhstan<sup>13</sup> (McFadden, Alpysbaeva, Alimgazinov, 2019). In this archive, over a million documents have been digitized, an intelligent search system has been implemented, remote access to the catalog and document ordering has been provided, and a series of databases have been developed, including: "Nomenclature Personnel of Soviet Kazakhstan"<sup>14</sup>, containing biographies of leaders of party, Komsomol, administrative, financial, trade union bodies, education and healthcare, as well as commissioners of military commissariats of Kazakhstan (1919-1991) starting from the county and district levels; "Prisoners of War from Kazakhstan in World War II. Republican Database"<sup>15</sup>, which contains over 700,000 documents and information on 36,000 individuals; "1930-1933 Famine in Kazakhstan"<sup>16</sup>, a unified database of famine victims, which contains information on 1,700 people who died from hunger in the 1930s. It seems that among Central Asian countries, an emerges as a leader in the field which is probably also related to existing government programs such as "Digital Kazakhstan"<sup>17</sup> and "Cultural Heritage"<sup>18</sup>.

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<sup>13</sup> Қазақстан Республикасы Президентінің Архиві, <https://archive.president.kz>.

<sup>14</sup> Номенклатурные кадры советского Казахстана, <https://archive.president.kz/ru/bd-nomenklaturnye-kadry-sovetskogo-kazakhstan>.

<sup>15</sup> Военнопленные-казахстанцы Второй мировой войны. Республиканская база данных, <http://tutkyn.kz>.

<sup>16</sup> 1930-1933 жж. Қазақстандағы ашаршылық. <http://asharshylyq.kz>.

<sup>17</sup> Государственная программа „Цифровой Казахстан“, <https://www.gov.kz/memleket/entities/mdai/activities/14764>.

<sup>18</sup> Государственная программа «Культурное наследие». Астана, 2006-2011 годы.

The distinctive approach to digital technologies in Uzbekistan's cultural heritage sector is characterized by a focus on enhancing tourist attractiveness and digital applications for museums, for example, NazzAR<sup>19</sup> based on augmented reality tools (Гагарина, 2024; Шамсиева, 2024; Эргашева, 2022). Regarding Kyrgyzstan, it is important to highlight the significant role of NGOs, especially Esimde<sup>20</sup> dedicated to preserving cultural heritage and historical memory in Kyrgyzstan and creating databases and other resources.

While digital history in Central Asia encompasses a broad chronological and thematic range, there is a notable bias towards the history of Soviet repressions. Several leading specialists in the field of digital history and the application of quantitative methods in historical research specialize in the history of Soviet repressions, focusing on creating relevant databases and applying quantitative and statistical methods to analyze these issues. The focus on Soviet repressions in Central Asian digital history projects can be attributed to a combination of historical significance, data availability, technological potential, and ethical imperatives. This period played a crucial role in shaping modern Central Asian societies and politics, leaving an indelible mark on the region's collective memory. The availability of extensive archival materials related to Soviet repressions provides a rich source for digital humanities research. Moreover, digital tools offer unprecedented opportunities to reveal new insights into the scale and patterns of these historical events, allowing for more comprehensive and nuanced analyses. Among the prominent scholars working in this area are: Kairat Alimgazinov, Shayyrkul Batyrbaeva (Батырбаева, 2003), Saule Zhakishева (Жакишева, 2021); Albina Zhanbossinova (Жанбосинова, 2013), Baurzhan Zhanguutin, (Жангуттин, 2024); Zamira Ishankhodzhaeva (Ишанходжаева, 2011; Ishankhodzhaeva, no date).

Despite the significant progress in digital history of Soviet repressions, the field faces several notable limitations. Many of the databases being created are not readily accessible to researchers and are not integrated into broader databases or projects related to the history of repressions, significantly restricting their potential impact and utility. This limited accessibility stems from a complex interplay of factors, including privacy concerns surrounding sensitive information, institutional barriers, technical challenges, funding constraints, and intellectual property issues. These limitations pose significant challenges to collaborative research efforts and hinder the ability of the international research community to engage with and contribute to the study of Soviet repressions in Central Asia. This partly corresponds to the discussion in the historiography of the 1990s and 2000s, called "Me and my database" (Доорн, 1995; Корниенко, Гагарина, Поврозник, 2021).

### **Thematic events and studying the needs of the community**

As part of the preparation of the project and in the process of its implementation, the following events were organized and observed:

1. The round table "Digital humanities in Central Asia", held online on March 15, 2023<sup>21</sup>.

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<sup>19</sup> NazzAR, <https://nazzar.uz>.

<sup>20</sup> Эсимде, <https://esimde.org>.

<sup>21</sup> The round table "Digital humanities in Central Asia", <https://ca.dhcloud.org>.



2. Seminar series “Digital History in/of Central Asia”<sup>22</sup> organised since November 2023 by the Chair of Modern and Eastern European History, Friedrich Alexander University Erlangen-Nuremberg in collaboration with the German Association for East European Studies (Deutsche Gesellschaft für Osteuropakund).

3. The panel discussion “Digital History Central Asia” during the CESS 2024 Conference, organised by the Central Eurasian Studies Society and held in Almaty, Kazakhstan, from 6 to 9 June 2024.

4. Several keynotes and sessions presentations on digital humanities and digital history at onsite and online conferences and other academic events in Central Asia (Kazakhstan, Kyrgyzstan, Uzbekistan), including: International conference “Mirzo Ulugbek – the Great Scientist, Thinker and Statesman”, Tashkent, April 2023 and May 2024; International pedagogical forum: “Education: a look into the future”, Tashkent, April 2023 and Namangan, May 2024; Decade of science 2023, Abai University, Almaty, April 2023; International conference “Innovative technologies: problems and solutions of implementation in sciences and projects”, Tashkent, May 2023; Summer school “Challenges in the field of human rights in Central Asia”, Bishkek, Kyrgyzstan, June 2023; Round table “Problems and prospects for the development of digital humanities in the Republic of Kazakhstan and the EU”, Almaty, September 2023; International conference “Digital technologies in history education: international experience and perspectives”, Tashkent, October 2023.

These events not only served as traditional forums for exchanging ideas and presenting projects and research, but also played a significant role in forming and understanding a regional community. They became important platforms for identifying and discussing the needs of researchers, fostering collaboration, and driving the growth of digital humanities and digital history in Central Asia. These meetings served as a window into the current state of digital history scholarship in the region, a kind of “real-time historiography”. Mentioned above initiatives represent three distinct formats, each tailored to engage different segments of the academic community. In studying digital history in Central Asia, we aimed to examine it from multiple perspectives: from the digital angle, focusing on technological and methodological aspects; from the perspective of regional historical scholarship; and from a broader academic viewpoint. The first format (represented by points 1 and partly 3 in the list above) primarily targets digital humanists and historians within the region, or those who closely associate themselves with digital approaches to humanities research in Central Asia. This group consists of scholars who are actively employing or interested in digital methodologies in their study of Central Asian history, culture, and language. The second format (represented by points 2 in the list above) is designed for historians from various countries who are engaged in research on specific themes related to Central Asian history. While these scholars may not necessarily specialize in digital methods, the discussions centred on how digital approaches can enhance and transform their research. By integrating digital history perspectives into these thematic discussions, we aimed to demonstrate the potential of computational methods in uncovering new insights, managing large-scale data, and visualizing complex historical processes. The third format approach (represented partly by points 3 and 4 in the list above) allows for a broad,

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<sup>22</sup> Seminar series “Digital History in/of Central Asia”, <https://www.osteuropa.phil.fau.de/digital-history-central-asia>.

rather than deep, engagement aiming to reach the broader academic community that may not have direct ties to digital history or specific Central Asian historical research. This audience includes scholars and students from various disciplines who might benefit from exposure to digital approaches in humanities research or gain new perspectives on Central Asian studies. This diversity of formats and audiences allows for a more nuanced understanding of current needs and situations from multiple perspectives. By engaging with different groups, we gain insights into the varied challenges, interests, and potential areas for development across the spectrum of digital humanities and historical research in Central Asia. This multi-faceted approach enables us to identify common threads and unique concerns, thereby informing more comprehensive and effective strategies for advancing digital history in the region.

The purpose of **the round table “Digital humanities in Central Asia”** was to discuss the digital transformation of humanities research and education at universities in Central Asia, present such research and projects, and develop the digital humanities community in the region. The round table included three 1.5-hour panel discussions, where experts briefly presented their vision and answer questions from moderators and participants: “Digital studies of the history, culture and languages of Central Asia”, “Digital preservation and representation of cultural heritage and historical memory”, “Educational programs and infrastructure development of Digital humanities in Central Asia”. The event was initiated by Shaiyrkul Batyrbaeva, Dinara Gagarina, Baurzhan Zhanguddin, Zamira Ishankhodzhaeva, Iroda Shamsieva. DH CLOUD Community<sup>23</sup> played a role in conducting the event and issued participation certificates on its behalf. The panel of expert speakers included over 20 specialists such as linguists, historians, art historians, media and digital heritage preservation experts, and developers of digital humanities projects focused on Central Asia. Over 200 people registered for the roundtable, with more than 150 participants from Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan, Russia, and other countries attending. The roundtable was the first event of its kind, bringing together researchers, practitioners, and scholars from various disciplines, universities, and countries across Central Asia (Гагарина, 2024).

During the round table “Digital humanities in Central Asia” in 2023 a survey was conducted to assess the community's needs and gather suggestions from colleagues on new topics and meeting formats. The survey was attended by 40 people, most of whom work in science and education (60%) or study at universities (22.5%). Both the round table and the survey had a notably higher proportion of historians compared to typical digital humanities conferences (during the survey, 45% considered themselves historians), likely due to the program committee's emphasis on historical topics. While we acknowledge that this survey was conducted on a small sample size, the targeted selection of respondents allows us to draw meaningful insights from the results, despite their limitations.

The survey results indicate a strong preference among participants for various digital humanities event formats. Educational webinars and workshops emerged as the most popular, with 70% of respondents expressing interest. This was closely followed by online open lectures, attracting 60% of participants. Online scientific conferences also garnered significant interest, with 57.5% of respondents indicating their desire to attend such events. Interestingly, there was a notable difference in preference between online and offline formats for scientific

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<sup>23</sup> DH CLOUD Community, <https://dhcloud.org>.

conferences. While 57.5% were interested in online conferences, only 27.5% showed interest in attending offline scientific conferences. This disparity might reflect the growing acceptance and convenience of digital platforms in academic settings. At the same time travel expenses remain a significant barrier to conference participation, particularly for scholars from Central Asia, especially when it comes to attending events in distant foreign countries. Summer and winter schools in offline formats appealed to 32.5% of the respondents, suggesting a continued interest in immersive, in-person learning experiences. These findings highlight a clear trend towards digital and remote learning preferences in the field of digital humanities, while still maintaining some interest in traditional offline formats. Notably, no one indicated no need for such events, underscoring the overall high interest in digital humanities educational opportunities across various formats.

The survey also included a question about respondents' interests in various areas of digital humanities and related disciplines. Digital humanities as a whole and data science in humanities contexts emerged as the most popular areas, each selected by 55% of respondents. This indicates a strong general interest in the field as well as its data science applications. Closely following, digital history (including quantitative methods in history) was of interest to 52.5% of participants, highlighting the significance of historical studies within the digital humanities landscape. Computer methods of text analysis attracted 40% of respondents. Digitization and digital reproduction practices of cultural heritage, along with digital transformation of humanities education, also showed notable interest levels at 35% and 32.5% respectively. Geoinformation technologies and computer methods for analysing audiovisual sources each interested 25% of respondents, indicating a moderate but significant interest in spatial and audiovisual analysis techniques. This distribution of interests suggests a vibrant and multifaceted engagement with digital humanities among the surveyed group, with particular emphasis on overall concepts and data science applications.

The survey conducted produced expected results, confirming our initial hypotheses and serving as a valuable foundation for planning subsequent events and selecting appropriate formats. These findings provided insights that informed the decision-making process for future initiatives in the field of digital humanities in the region. Overall, we believe that the needs identified in the region align with international trends in digital humanities, or perhaps are a consequence of these trends (albeit with the caveat that our sample was significantly skewed towards historians). This alignment suggests that the regional digital humanities community is in step with global developments in the field.

The ongoing **seminar series “Digital History in/of Central Asia”** represents a focused approach to exploring the intersection of digital methodologies and historical research in the region. This initiative delves into Central Asian history, with a particular emphasis on the 19th to 21st centuries, addressing themes such as colonial legacies, Soviet-era repressions and deportations, cultural history, and memory studies within the Central Asian context, while simultaneously exploring digital tools and approaches to illuminate these complex historical narratives. A strength of the seminar series lies in its diverse participation. Speakers include leading researchers and experts from Central Asian countries who are at the forefront of digital history and the preservation and study of historical cultural heritage. The audience comprises a balanced mix of scholars from both Europe and Central Asia, creating a productive environment for cross-regional dialogue and knowledge exchange. From November 2023 to June 2024, six seminar sessions were conducted, each attracting between 20 to 30 participants through both

online and onsite attendance. The accessibility of these sessions was further enhanced by the publication of recordings on the chair's YouTube channel<sup>24</sup>, extending the reach and impact of the discussions.

Beyond their role as platforms for project and idea sharing, these seminars have become valuable indicators of current trends and interests in digital history within the Central Asian context. The level of engagement, evidenced by registration numbers, the dynamics of discussions, and the focus on specific topics, provides insight into the most pressing and relevant issues in the field. Notably, topics such as access to historical sources in archives and the digitization of archival materials in the region have emerged as areas of particular interest, especially among European researchers. This heightened attention underscores the critical importance of archival access and digitization as key intersections between digital humanities practices and historical research in Central Asia.

**The panel “Digital History Central Asia”** during the CESS 2024 Conference convened scholars and practitioners to explore digital methodologies in the context of Central Asian history. Covering Kazakhstan, Uzbekistan, and Kyrgyzstan, the panel brought together a diverse group of experts from state and private universities, as well as professionals from the GLAM (Galleries, Libraries, Archives, and Museums) sector. This diverse representation ensured a comprehensive view of the digital humanities landscape in Central Asia. Panellists engaged in rich discussions on ongoing research projects, the development and application of digital tools, the current state of the GLAM sector, and digitization efforts. The presentations showcased the transformative potential of digital methods in historical scholarship, covering topics such as analysing Soviet repressions (Baurzhan Zhanguitin), exploring and digitizing archives (Kairat Alimgazinov), developing new methods for accessing historical sources, utilizing AI for research (Iroda Shamsieva), and applying postcolonial digital humanities approaches (Dinara Gagarina, Moritz Florin). The panel discussion highlighted again a significant interest in the digitization of archives and improving access to them. Another interesting point related to the needs for advancing digital history in Central Asia. Notably, when asked about necessary resources, researchers prioritized collaborative efforts and knowledge-sharing over financial support. They emphasized the importance of joint research initiatives and educational formats.

**The series of presentations on digital history and digital humanities at non-specialized events** revealed a kind of paradoxical situation in the field. On one hand, these sessions exposed a generally low level of awareness about digital methodologies among traditional historians and researchers in Central Asia (that this is generally typical for the international situation in the field). Many attendees were unfamiliar with basic concepts of digital humanities or the potential applications of computational methods in historical research. However, this lack of awareness was counterbalanced by a notable enthusiasm and curiosity about the field. Presentations on digital tools and methods often drew engaged audiences, with lively Q&A sessions and requests for further information. This interest manifested in several ways, including in particular numerous follow-up inquiries about resources for learning digital methods and expressions of interest in collaborative projects incorporating digital approaches. This dichotomy between low awareness and high interest suggests a significant potential for growth in digital history within the region.

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<sup>24</sup> East European and Central Asian History at FAU, [www.youtube.com/@OstEuropaFAU](https://www.youtube.com/@OstEuropaFAU).

### Results of the study

The study showed the following results:

1. Digital humanities in Central Asia lags Western countries in terms of institutional infrastructure, but significant activity exists in applying digital methods to humanities research, including computational linguistics, digital philosophy, digital history, and cultural heritage preservation.

2. The absence of formal digital humanities structures in Central Asia presents both challenges for standardization and collaboration, and opportunities for developing region-specific frameworks that address local needs and perspectives.

3. Digital history in Central Asia shows growing interest and investment, with various projects being conducted by researchers, universities, and GLAM institutions.

4. Digital history in Central Asia is strongly influenced by Russian scholarship, particularly through the “History and Computer” association, which shapes terminology and methodological approaches.

5. There is a notable bias towards the history of Soviet repressions in Central Asian digital history projects, driven by historical significance, data availability, and technological potential. Despite progress, many databases on Soviet repressions face accessibility issues, limiting their impact and hindering collaborative research efforts.

### Conclusion

The study reveals growing interest in digital humanities across Kazakhstan, Kyrgyzstan, and Uzbekistan, with significant activity in computational linguistics, digital philosophy, digital history, and cultural heritage preservation. Digital history initiatives in Central Asia are playing a crucial role in enhancing historical research, fostering community engagement, and supporting infrastructural development. By leveraging modern technologies, these projects preserve the region's heritage and promote a deeper understanding of its history. However, challenges persist, including lack of formal infrastructures and limited international representation. Emerging regional events and collaborations demonstrate an increasing awareness of local perspectives and cross-regional dialogue, crucial for identifying specific needs of the Central Asian digital humanities community and fostering global academic connections. As digital tools evolve, the potential for advancement is vast, with region-specific frameworks, increased collaboration, and integration of postcolonial perspectives promising further developments.

### References

Abdurakhmonova N., Ismailov A., Mengliev D. Developing NLP Tool for Linguistic Analysis of Turkic Languages // 2022 IEEE International Multi-Conference on Engineering, Computer and Information Sciences (SIBIRCON), Yekaterinburg, Russian Federation. – 2022. – P. 1790-1793. <https://doi.org/10.1109/SIBIRCON56155.2022.10017049>.

Abdurakhmonova N., Ismailov A., Sayfulleyeva R. MorphUz: Morphological Analyzer for the Uzbek Language // 2022 7th International Conference on Computer Science and Engineering (UBMK), Diyarbakir, Turkey. – 2022. – P. 61-66. <https://doi.org/10.1109/UBMK55850.2022.9919579>.

Alliance of Digital Humanities Organizations (ADHO), <https://adho.org>.

Archive Of The President Of The Republic Of Kazakhstan, <https://archive.president.kz>.

Association "History and Computer", <https://aik-hisc.ru>.

Batyrbaeva Sh.D. The population of Kyrgyzstan in the 20-50s of the XX century: historical and demographic analysis. Bishkek: KNU, 2003.

Batyrbaeva Sh. D. Digital turn and historical science // Historical computer science. – 2019. – No.3 (29).

Batyrbaeva Sh.D., Shcherbakova S.A., Zainullin R.Sh., Ploskikh V.V. Historical informatics in Kyrgyzstan: implementation experience and development prospects // Bulletin of the Perm University. Ser. History. – 2011. – No. 2 (16).

Bekenova Z., Müürsepp P., Nurysheva G., Turarbekova L. Artificial Intelligence, Value Alignment and Rationality // TalTech Journal of European Studies. – 2022. – Vol.12. – №1. – P.79-98. <https://doi.org/10.2478/bjes-2022-0004>

CenterNet, <https://dhcenternet.org>.

CLARIN-ERIC, <https://www.clarin.eu>.

Clavert F. The Digital Humanities multicultural revolution did not happen yet // Frédéric Clavert (blog). 2013. April 26. <http://www.clavert.net/the-digital-humanities-multicultural-revolution-did-not-happen-yet>

DARIAH-EU, <https://www.dariah.eu>.

DH CLOUD Community, <https://dhcloud.org>.

Digital History Lab, <https://dighistlab.mydurable.com>.

Digital Humanities Awards, <http://dhawards.org>.

Digital Humanities Course Registry, <https://dhcr.clarin-dariah.eu>.

Digital humanities in the Republic of Kazakhstan: local solutions for global problems, <https://dthinkz.wordpress.com>.

Doorn P. Me and my database: moving towards the end of the "History and Computing" direction? // Newsletter of the Association "History and Computer". – 1995. – № 13.

East European and Central Asian History at FAU, [www.youtube.com/@OstEuropaFAU](http://www.youtube.com/@OstEuropaFAU).

Eichmann N., Weingart S. What's Under the Big Tent? A Study of ADHO Conference Abstracts, 2004-2014. 2015. [https://figshare.com/articles/presentation/What\\_s\\_under\\_the\\_Big\\_Tent\\_A\\_study\\_of\\_ADHO\\_Conference\\_Abstracts\\_2004\\_2014/1461760](https://figshare.com/articles/presentation/What_s_under_the_Big_Tent_A_study_of_ADHO_Conference_Abstracts_2004_2014/1461760)

Ergasheva Yu. The role of digital technologies in the development of tourism and popularization of the historical and cultural heritage of Uzbekistan // The importance of digital technologies in the study of the history of Uzbekistan. –2022. 1(01), – 169–178. <https://doi.org/10.47689/v1i01.13366>.

Filchenko A., Goodman B., Sarseke G., Assylbekov Z. Multimedia Corpus of Modern Spoken Kazakh Language. <https://research.nu.edu.kz/en/projects/multimedia-corpus-of-modern-spoken-kazakh-language>

Gagarina D. Decolonizing knowledge through postcolonial digital humanities in Central Asia // Science and innovation. – 2024. – Vol. 3. – P. 479-481. <https://zenodo.org/records/11162683>

Gagarina D.A. Digital Humanities in Central Asia: notes on the margins of the round table // Digital Humanities Research. – № 1. – 2024.

Gagarina D., Florin M. Postcolonial Digital Humanities Central Asia) // CESS 2024. Almaty. <https://nomadit.co.uk/conference/cess2024/paper/87196>.

Ishankhodzhayeva Z.R. The repressive policy of the Soviet government and the culture of Uzbekistan: the tragedy of survival (1925-1953). Tafakkur, 2011.

Ishankhodzhayeva Z.R., Tagaev J.E. Digital transformation of science and education: international conference in Tashkent // Historical Informatics. – 2022. – No.4 (42).

Ishankhodzhayeva Z. Creation of an electronic platform and a multimedia complex for a deeper study of the heritage and perpetuating the memory of the victims of repression and emphasizing the importance of their socio-political, spiritual and educational ideas in education and upbringing. Project number: A-OT-2021-542. <https://nuu.uz/en/qatagon-qurbonlarining-merosini-yanada-chuqur-organish-ularning-xotirasini-abadiylashtirish-va-ijtimoiy-siyosiy-manaviy-marifiy-goyalarining-tal>.

Kornienko S.I., Gagarina D.A., Povroznik N.G. Historical information systems: theory and practice. Moscow: Publishing House of the Higher School of Economics, – 2021. – 231 p.

McFadden C., Alpysbaeva N.K., Alimgazinov K.Sh. Informatization of archival business in Kazakhstan (foreign and domestic experience) // Journal of history. 2019. №2 (93).

Mukhamadeyeva R., Kusainova U., Mukhamadeyeva I., Yenglissova G., Zhaksybaeva A.. Digitalization of the Historical and Cultural Heritage of Kazakhstan // Kurdish Studies. – 2023. – №11 (2). – P. 5058-69. <https://kurdishstudies.net/menu-script/index.php/KS/article/view/1078>.

NazzAR, <https://nazzar.uz>.

Nomenclature cadres of Soviet Kazakhstan, <https://archive.president.kz/ru/bd-nomenklaturnye-kadry-sovetskogo-kazakhstan>.

O'zbek tili korpusi, <https://uzbekcorpus.uz>.

Prisoners of war-Kazakhstanis of the Second World War. The Republican database, <http://tutkyn.kz>.

Raqamli Tarix, <https://raqamlitarix.uz>.

Risam R. New Digital Worlds: Postcolonial Digital Humanities in Theory, Practice, and Pedagogy. Northwestern University Press, 2018.

Seminar series "Digital History in/of Central Asia", <https://www.osteuropa.phil.fau.de/digital-history-central-asia>.

Spiro L. "This Is Why We Fight": Defining the Values of the Digital Humanities // Debates in the Digital Humanities. U of Minnesota Press, 2012.

Shamsieva I.M. AI tools in the framework of digital preservation of the historical heritage of Uzbekistan // CESS 2024. Almaty. <https://nomadit.co.uk/conference/cess2024/paper/87219>

Shamsieva I.M. The history of Uzbekistan in the Internet // Newsletter of the association "History and computer". – 2006. – № 34. – P. 160-161.

Taranto P., Di Liberti G., Motta S. Проект LABΩ // Journal of Philosophy, Culture and Political Science – 2021. – Vol. 75(1). – P. 36–40. <https://doi.org/10.26577/jpcp.2021.v75.i1.04>

The round table "Digital humanities in Central Asia", <https://ca.dhcloud.org>.

1930-1933. Famine in Kazakhstan, <http://asharshylyq.kz>.

The state program "Digital Kazakhstan", <https://www.gov.kz/memleket/entities/mdai/activities/14764>.

The state program "Cultural Heritage". Astana, 2006-2011, <https://e-history.kz/ru/first-president/show/12378>.

Virtual laboratory of visual anthropology, <https://virtualanthropologylab.kz/english>.

Zhakisheva S. A. Elimination of Bay farms in Kazakhstan at the turn of the 20-30s of the twentieth century: new approaches, methods and technologies. Almaty: Kazakh Universities, – 2021 – 222 p.

Zhakisheva S.A. "Mind Games" or "Proof of life": historical computer science and/or digital history? // Historical Informatics. – 2020. – №1 (31).

Zhakisheva S.A. Historical informatics in Kazakhstan: theory, historiography, methods and technologies. Almaty: KazATiSO, – 2011. – 336 p.

Zhanbossinova A.S. Political repressions in the USSR (1920-1950): a historical and statistical study // European Researcher. – 2013. – Vol. (45), – № 4-1.

Zhanguttin B. O. Digital approaches to the study of the rehabilitation process of victims of political repression of the 1930s-1950s in Kazakhstan: opportunities and limitations // CESS 2024. Almaty. <https://nomadit.co.uk/conference/cess2024/paper/87216>.

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### **Орталық Азиядағы цифрлық тарих: бастамалар, аймақтық ерекшеліктер және қоғамдастық**

**Аннотация.** Бұл мақалада Қазақстан, Қырғызстан және Өзбекстанға бағытталған Орталық Азиядағы цифрлық тарих саласындағы бастамалардың дамуы зерттеледі. Өңірдегі цифрлық гуманитарлық ғылымдар саласындағы сын-қатерлер, мүмкіндіктер мен үрдістер қарастырылады, мәдени мұраны зерттеу және сақтау үшін постколониялық перспективалар мен практикалық цифрлық әдістерді енгізудің маңыздылығы атап өтіледі. Зерттеу қазіргі цифрлық тарих жобаларын жан-жақты талдау үшін әдебиеттерге шолулар, сұхбаттар, сауалнамалар, далалық сапарлар және кейстерді қоса алғанда, аралас әдістемелік тәсілді қолданады. Орталық Азиядағы цифрлық гуманитарлық ғылымдардың өсуіне қарамастан, мақалада халықаралық форумдарда өкілдіктің жеткіліксіздігі, шектеулі ғылыми инфрақұрылымдар және батыстық немесе ресейлік көзқарастардың басым болуы сияқты кедергілер анықталды. Орталық Азиядағы цифрлық тарихшылар қауымдастығын дамытуға және оның қажеттіліктерін зерттеуге көп көңіл бөлінеді. Мақалада 3D сияқты инновациялық технологиялар арқылы тарихи әңгімелерді отарсыздандыру және мәдени мұраны сақтауды жақсарту үшін цифрлық гуманитарлық ғылымдардың әлеуеті көрсетілген.

**Түйінді сөздер.** Сандық гуманитарлық ғылымдар; цифрлық тарих; тарих 3D мәдени мұраны модельдеу; қоғамдастық құру

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### **Цифровая история в Центральной Азии: инициативы, региональная специфика и сообщество**

**Аннотация.** В данной статье исследуется развитие инициатив в области цифровой истории в Центральной Азии, с фокусом на Казахстан, Кыргызстан и Узбекистан. Рассматриваются вызовы, возможности и тенденции в сфере цифровых гуманитарных наук в регионе, подчеркивается важность включения постколониальных перспектив и практических цифровых методов для



исследований и сохранения культурного наследия. Исследование использует смешанный методологический подход, включая обзоры литературы, интервью, опросы, полевые визиты и тематические исследования, для всестороннего анализа текущих проектов в области цифровой истории. Несмотря на рост цифровых гуманитарных наук в Центральной Азии, в статье выявлены такие препятствия, как недостаточное представительство на международных форумах, ограниченные исследовательские инфраструктуры и преобладание западных или российских точек зрения. Значительное внимание уделяется развитию сообщества цифровых историков в Центральной Азии и изучению его потребностей. В статье подчеркивается потенциал цифровых гуманитарных наук для деколонизации исторических нарративов и улучшения сохранения культурного наследия с помощью инновационных технологий, таких как 3D. В заключение подчеркивается важность разработки региональных подходов и развития сотрудничества для продвижения цифровой истории в Центральной Азии.

**Ключевые слова.** цифровые гуманитарные науки; цифровая история; история 3D-моделирование культурного наследия; построение сообщества

### Список литературы

Abdurakhmonova N., Ismailov A., Mengliev D. Developing NLP Tool for Linguistic Analysis of Turkic Languages // 2022 IEEE International Multi-Conference on Engineering, Computer and Information Sciences (SIBIRCON), Yekaterinburg, Russian Federation. – 2022. – P. 1790-1793. <https://doi.org/10.1109/SIBIRCON56155.2022.10017049>.

Abdurakhmonova N., Ismailov A., Sayfulleyeva R. MorphUz: Morphological Analyzer for the Uzbek Language // 2022 7th International Conference on Computer Science and Engineering (UBMK), Diyarbakir, Turkey. – 2022. – P. 61-66. <https://doi.org/10.1109/UBMK55850.2022.9919579>.

Alliance of Digital Humanities Organizations (ADHO), <https://adho.org>.

Bekenova Z., Mürsepp P., Nurysheva G., Turarbekova L. Artificial Intelligence, Value Alignment and Rationality // TalTech Journal of European Studies. – 2022. – Vol.12. – No.1. – P.79-98. <https://doi.org/10.2478/bjes-2022-0004>

centerNet, <https://dhcenternet.org>.

CLARIN-ERIC, <https://www.clarin.eu>.

Clavert F. The Digital Humanities multicultural revolution did not happen yet // Frédéric Clavert (blog). – 2013. April 26. <http://www.clavert.net/the-digital-humanities-multicultural-revolution-did-not-happen-yet>

DARIAH-EU, <https://www.dariah.eu>.

DH CLOUD Community, <https://dhcloud.org>.

Digital History Lab, <https://dighistlab.mydurable.com>.

Digital Humanities Awards, <http://dhawards.org>.

Digital Humanities Course Registry, <https://dhcr.clarin-dariah.eu>.

Digital humanities in the Republic of Kazakhstan: local solutions for global problems, <https://dthinkz.wordpress.com>.

East European and Central Asian History at FAU, [www.youtube.com/@OstEuropaFAU](http://www.youtube.com/@OstEuropaFAU).

Eichmann N., Weingart S. What's Under the Big Tent? A Study of ADHO Conference Abstracts, 2004-2014. 2015. [https://figshare.com/articles/presentation/What\\_s\\_under\\_the\\_Big\\_Tent\\_A\\_study\\_of\\_ADHO\\_Conference\\_Abstracts\\_2004\\_2014/1461760](https://figshare.com/articles/presentation/What_s_under_the_Big_Tent_A_study_of_ADHO_Conference_Abstracts_2004_2014/1461760).

Filchenko A., Goodman B., Sarseke G., Assylbekov Z. Multimedia Corpus of Modern Spoken Kazakh Language. <https://research.nu.edu.kz/en/projects/multimedia-corpus-of-modern-spoken-kazakh-language>.

Gagarina D. Decolonizing knowledge through postcolonial digital humanities in Central Asia // Science and innovation. – 2024. – Vol. 3. – P. 479-481. <https://zenodo.org/records/11162683>.

Gagarina D., Florin M. Postcolonial Digital Humanities Central Asia // CESS 2024. Almaty. <https://nomadit.co.uk/conference/cess2024/paper/87196>.

Ishankhodzhaeva, Zamira. Creation of an electronic platform and a multimedia complex for a deeper study of the heritage and perpetuating the memory of the victims of repression and emphasizing the importance of their socio-political, spiritual and educational ideas in education and upbringing. Project number: A-OT-2021-542. <https://nuu.uz/en/qatagon-qurbonlarining-merosini-yanada-chuqur-organish-ularning-xotirasini-abadiylashtirish-va-ijtimoiy-siyosiy-manaviy-marifiy-goyalarining-tal>.

McFadden C., Alpysbaeva N.K., Alimgazinov K.Sh. Informatization of archival business in Kazakhstan (foreign and domestic experience) // Journal of history. – 2019. – №2 (93).

Mukhamadeyeva R., Kusainova U., Mukhamadeyeva I., Yenglissova G., Zhaksybaeva A.. Digitalization of the Historical and Cultural Heritage of Kazakhstan // Kurdish Studies. – 2023. – N11(2). – P. 5058-69. <https://kurdishstudies.net/menu-script/index.php/KS/article/view/1078>.

NazzAR, <https://nazzar.uz>.

O'zbek tili korpusi, <https://uzbekcorpus.uz>.

Raqamli Tarix, <https://raqamlitarix.uz>.

Risam R. New Digital Worlds: Postcolonial Digital Humanities in Theory, Practice, and Pedagogy. Northwestern University Press, 2018.

Seminar series “Digital History in/of Central Asia”, <https://www.osteuropa.phil.fau.de/digital-history-central-asia>.

Spiro L. “This Is Why We Fight”: Defining the Values of the Digital Humanities // Debates in the Digital Humanities. U of Minnesota Press, 2012.

Taranto P., Di Liberti G., Motta S. Проект LABΩ // Вестник КазНУ. Серия философии, культурологии и политологии. – 2021. – № 75(1). – P. 36–40. <https://doi.org/10.26577/jpcp.2021.v75.i1.04>.

The round table “Digital humanities in Central Asia”, <https://ca.dhcloud.org>.

Virtual laboratory of visual anthropology, <https://virtualanthropologylab.kz/english>.

Ассоциация „История и компьютер”, <https://aik-hisc.ru>.

Батырбаева Ш.Д. Население Кыргызстана в 20–50-е годы XX века: историко-демографический анализ. Бишкек: КНУ. – 2003.

Батырбаева Ш.Д. Цифровой поворот и историческая наука // Историческая информатика. – 2019. – №3 (29).

Батырбаева Ш.Д., Щербакова С.А., Зайнулин Р.Ш., Плоских В.В. Историческая информатика в Кыргызстане: опыт внедрения и перспективы развития // Вестник Пермского ун-та. Сер. История. – 2011. – №2 (16).

Военнопленные-казахстанцы Второй мировой войны. Республиканская база данных, <http://tutkyn.kz>.

Гагарина Д.А. Digital Humanities в Центральной Азии: заметки на полях круглого стола // Цифровые гуманитарные исследования. – 2024. – № 1.

Государственная программа „Цифровой Казахстан”, <https://www.gov.kz/memleket/entities/mdai/activities/14764>.

Государственная программа «Культурное наследие». Астана, 2006-2011 годы. <https://e-history.kz/ru/first-president/show/12378>.

Доорн П. Я и моя база данных: движение к концу направления «История и компьютеринг»? // Информационный бюллетень Ассоциации «История и компьютер». – 1995. – № 13.

Жакишева С. А. Элиминация Байский хозяйств в Казахстане на рубеже 20-30-х гг. XX в.: новые подходы, методы и технологии. Алматы: Қазақ университеті. – 2021. – 222 с.

Жакишева С.А. „Игры разума” или „доказательство жизни”: историческая информатика и/или цифровая история? // Историческая информатика. – 2020. – №1 (31).

Жакишева С.А. Историческая информатика в Казахстане: теория, историография, методики и технологии. Алматы: КазАТиСО, 2011. 336 с.

Жанбосинова А.С. Политические репрессии в СССР (1920–1950 гг.): историко-статистическое исследование // European Researcher. – 2013. – Vol. (45), № 4-1.

Жангуттин Б. О. Цифровые подходы к изучению процесса реабилитации жертв политических репрессий 1930-1950-х гг. в Казахстане: возможности и ограничения // CESS 2024. Almaty. <https://nomadit.co.uk/conference/cess2024/paper/87216>.

Ишанходжаева З.Р. Репрессивная политика советской власти и культура Узбекистана: трагедия выживания (1925-1953 гг.). Тафаккур. – 2011.

Ишанходжаева З.Р., Тагаев Ж.Э. Цифровая трансформация науки и образования: международная конференция в Ташкенте // Историческая информатика. – 2022. – №4 (42).

Корниенко С.И., Гагарина Д.А., Поврозник Н.Г. Исторические информационные системы: теория и практика. М. : Изд. дом Высшей школы экономики. – 2021. – 231 с.

Қазақстан Республикасы Президентінің Архиві, <https://archive.president.kz>.

Номенклатурные кадры советского Казахстана, <https://archive.president.kz/ru/bd-nomenclaturnye-kadry-sovetskogo-kazakhstan>.

1930–1933 жж. Қазақстандағы ашаршылық. <http://asharshylyq.kz>.

Шамсиева И.М. Инструменты AI в рамках цифрового сохранения исторического наследия Узбекистана // CESS 2024. Almaty. <https://nomadit.co.uk/conference/cess2024/paper/87219>.

Шамсиева И.М. История Узбекистана в Uznete // Информационный бюллетень ассоциации „История и компьютер”. – 2006. – № 34. – С. 160-161.

Эргашева Ю. Роль цифровых технологий в развитии туризма и популяризации историко-культурного наследия Узбекистана // Значение цифровых технологий в изучении истории Узбекистана. – 2022. – №1(01), 169–178. <https://doi.org/10.47689/v1i01.13366>.

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