

# SCIA-2024: Exploring New Horizons in Digital Humanities

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## Abstract

The 3rd International Workshop on Social Communication and Information Activity in Digital Humanities (SCIA-2024) took place in Lviv, Ukraine, on October 31, 2024, in a hybrid format, featuring both offline and online presentations via the Zoom platform. The workshop theme has been refined this year into six key areas of interest: Digitization of Historical and Cultural Objects; Computational Linguistics in Digital Humanities Practices; Data Visualization, Image Processing, and Media Design; Social Media and Information Behavior; Open Science, Open Data and Scholarly Digital Resources; Digital Pedagogy and Media Education. This volume of workshop proceedings features 16 papers, each rigorously reviewed and chosen for presentation and in-depth discussion.

## Keywords

Digital Humanities, SCIA, workshop proceedings

## 1. Introduction

The 3rd International Workshop on Social Communication and Information Activity in Digital Humanities (SCIA-2024) marks another milestone in fostering interdisciplinary dialogue on digital humanities and social communication. This year, the workshop was organized jointly by the Department of Social Communications and Information Activities of Lviv Polytechnic National University (Ukraine) [1] and the Department of Informatology, Bibliology and Media Education of the Marie Curie-Skłodowska University (Poland) [2].

For the first time, the workshop adopted a hybrid format, enabling in-person presentations at Lviv Polytechnic while offering online participation for speakers from other regions and countries. Live communication facilitated an informal exchange of ideas and practical experience, fostering active engagement and open discussion among the participants. The event attracted participation from scholars across ten countries: Ukraine, Poland, Georgia, Germany,

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the Netherlands, Kazakhstan, Canada, France, Slovakia, and Norway, enriching the discussions with varied international perspectives.

## 2. Submission analysis and workshop trends

An important aspect of the SCIA-2024 workshop was the rethinking of the thematic landscape in the context of Digital Humanities. The experience from previous workshops allowed for a better understanding of researchers' needs and a focus on the areas that generated the greatest interest [3]; [4]. This year, the editorial policy emphasized the quality of the presented content, adherence to computer science, and the use of modern methodological approaches.

A key moment in ensuring compliance with the workshop topics was the clear detailing and description of each of them. The priority areas included Digitization of Historical and Cultural Objects; Computational Linguistics in Digital Humanities Practices; Data Visualization, Image Processing, and Media Design; Social Media and Information Behavior; Open Science, Open Data and Scholarly Digital Resources; Digital Pedagogy and Media Education.

To ensure alignment with the chosen thematic sections and optimize the selection of articles, a detailed description of each workshop topic was provided [5].

Comparing the thematic landscape of workshops over the past years, it is noticeable that the demand for social media topics remains stable, while the share of research in the communication field continues to grow. It is also worth noting that the change in categories this year (their generalization and specification) has allowed for a clearer definition of thematic directions and optimization of article selection for the relevant sections.

This year, the category Social Media and Information Behavior is the most actively represented, accounting for 39% of submitted articles. It confirms a high interest in topics related to social media, which has been the one of the most popular areas during past years.

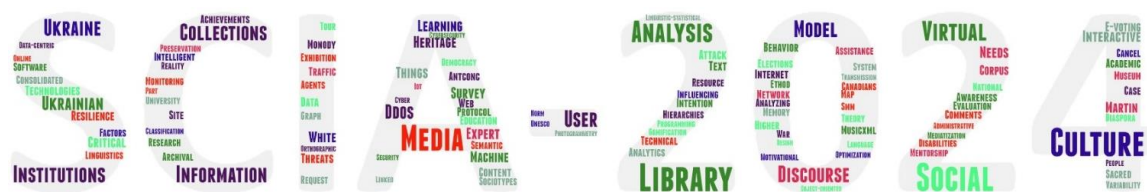
The topics that demonstrate sustained interest include Computational Linguistics in the Practices of Digital Humanities" (22%), Digitization of Historical and Cultural objects (11%) and Open Science, Open Data and Scholarly Digital Resources (11%).

At the same time, the topic Data Visualization, Image Processing and Media Design is not represented this year, which may indicate a shift in participants' interests or the merging of similar topics into other categories.

The analysis of keywords from the papers accepted for the SCIA-2024 workshop reveals several significant trends that reflect contemporary challenges and interests in the fields of cultural heritage, information technologies, and social media (Figure 1).

Significance of terms related to "social media," "online media," "social memory institutions," and "discourse analysis" points to an emphasis on the role of social media in shaping collective memory and influencing cultural discourses. The discussions surrounding "Cancel Culture" and "mediatization" particularly reflect the complex interrelations between information technologies and social changes.

The analysis of keywords related to "3D modeling," "virtual reality," "photogrammetry," and "machine learning" highlights a contemporary approach to the study and preservation of cultural artifacts. These technologies enable the creation of new interactive resources that enhance user awareness and engagement in exploring cultural heritage.



**Figure 1:** A visual summary of SCIA-2024 key concepts

The use of terms such as "Ukrainian diaspora," "Ukrainian Canadians," "cultural heritage preservation," and "national and cultural achievements" indicates a growing interest in the study of Ukrainian culture and its representation abroad. This underscores the importance of virtual exhibitions and interactive maps that showcase the achievements of Ukrainians in various fields.

Keywords such as "elections," "e-voting," and "democracy" highlight the relevance of issues related to electoral processes, emphasizing the importance of information security in the face of threats such as "cyber attacks" and "DDoS attacks."

The increasing use of terms associated with "technical higher education institutions," "gamification," "user needs," and "mentorship assistance" indicates a focus on the development of educational technologies and their impact on preparing future professionals in the information field.

The presence of terms related to "needs of people with disabilities," "user awareness," and "motivational intention" underscores the importance of adapting information resources to meet the needs of diverse population groups, which is a key aspect of modern information society.

The geographical distribution of authors participating in the SCIA-2024 workshop includes a range of contributors from various countries, such as Ukraine, Poland, Georgia, Germany, the Netherlands, Kazakhstan, Canada, France, Slovakia, and Norway. This diverse participation reflects the workshop's commitment to fostering an international dialogue in the field of Digital Humanities (Figure 2).

An analysis of foreign author participation over the past three years reveals notable trends. In SCIA-2022, the percentage of foreign authors was 14%, reflecting a primarily local focus. This figure slightly decreased to 13% in SCIA-2023, indicating some challenges in sustaining international engagement. However, in SCIA-2024, there was a significant resurgence, with foreign author participation rising to 27%. This increase reflects the organizers' concerted efforts to enhance the workshop's international appeal and collaboration, marking it as a key priority for the workshop's development.

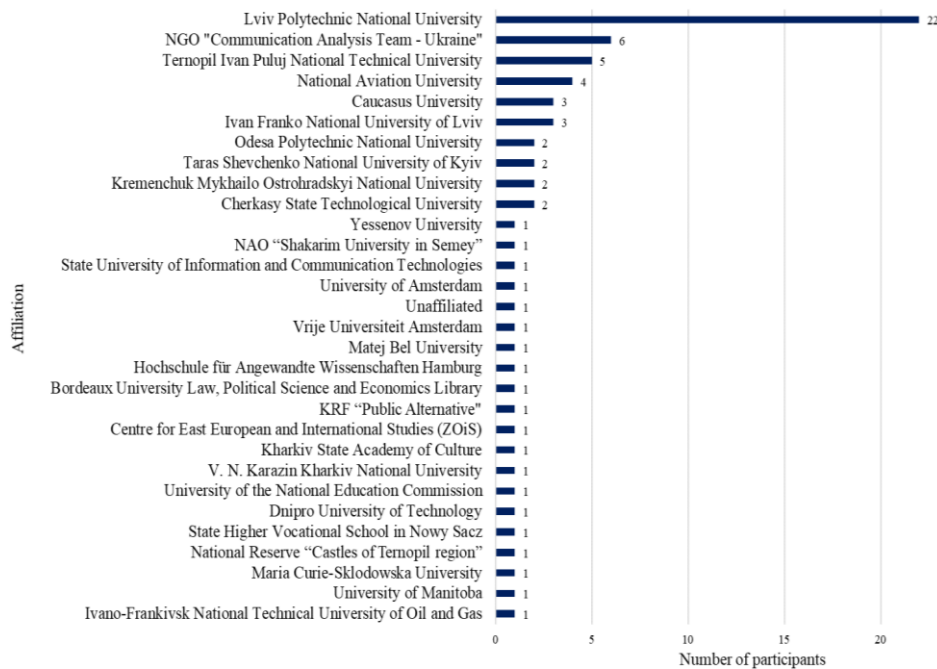
In 2024, there is an increase in the percentage of foreign authors, despite an overall decrease in the number of accepted articles and authors compared to previous years. This indicates the successful efforts of the workshop organizers to engage international participants and enhance the quality of the presented content.



**Figure 2:** Geographic distribution of SCIA-2024 workshop participants

To illustrate the institutional distribution of SCIA-2024 participants, a bar chart will show the number of participants by affiliation, underscoring the workshop's expanded reach not only internationally but also across various Ukrainian regions.

The geographic scope of SCIA-2024 is further highlighted by the diverse affiliations of its contributors (Figure 3).



**Figure 3:** Geographic distribution of SCIA-2024 workshop participants

In total, SCIA-2024 welcomed participants from 28 unique institutions, spanning both national and international affiliations. Of these, 15 distinct Ukrainian institutions were represented, highlighting the workshop's regional diversity within Ukraine itself.

## Acknowledgements

The SCIA-2024 organizers extend heartfelt thanks to the esteemed Program Committee members, our dedicated reviewers and all participants for their committed efforts, enthusiastic support and invaluable contributions to the success of this year's event.

We express profound gratitude to the Armed Forces of Ukraine and Ukrainian soldiers, whose unwavering defense upholds statehood, civilization, humanism, and European values.

Our sincere appreciation also goes to our partner countries, whose exceptional solidarity and support have been a cornerstone for the Ukrainian people in their journey toward independence.

Finally, we deeply value the resilience and dedication of the scientific community, whose pursuit of true knowledge endures, overcoming all obstacles and challenges.

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