WORKSHOP:

PERSPECTIVES OF DIGITAL HUMANITIES INFRASTRUCTURES

Monday, 25.9. 2023. 11:00 CET [online]

Models and Practices of Global Cultural Exchange and Non-aligned Movement. Research in the Spatio-Temporal Cultural Dynamics (Human-Computer Interaction Models and Structures of Virtual Research). The project is supported by the Croatian Science Foundation.

As we witness the growth of transnational digital humanities (DH) infrastructural initiatives, there is a persistent concern about the long-term perspectives and sustainability of these efforts. Due to differing goals, methodological outlines, data standards, technological progress, project and funding cycles, the sustainable perspectives of various DH platforms are often not adequately addressed and discussed. Focusing on DH infrastructures, the workshop will offer insights into the latest developments in the field presented by invited speakers. The presentations will be followed by a discussion focused on several critical questions:

Perspectives of system design: How can we facilitate the transition from complete, robust DH systems to flexible modules and prototypes?

Perspectives of interoperability: How can DH data be reused, transferred, and preserved for its scientific and social relevance in the long run?

Perspectives of trust: How can we address the (in)compatibility of neural network workflows and the requests for provenance of cultural data in DH systems?

* Official language of the workshop is English. The workshop will be held online (ZOOM): https://mit.zoom.us/j/99153407022 (Meeting ID: 991 5340 7022)

SCHEDULE:

11:00
Introduction
Ljiljana Kolešnik (Institute of Art History, Zagreb),
Nikola Bojić (Academy of Fine Arts, Zagreb)

11:15
Development of the concept of e-trust

Hrvoje Stančić
Chair of Archival and Documentation Sciences / Vice-Dean for Organization and
Development / InterPARES Trust AI project Executive Committee member
Department of Information and Communication Sciences
Faculty of Humanities and Social Sciences, University of Zagreb

The concept of trust in records will be discussed from the point of view of archival science. The transition to the digital records brought new challenges in the context of trustworthiness of the records. Their reliability, authenticity, and accuracy have become challenged by the volatility of the digital environment and fast technological progress. This was recognized back in 1998 when the InterPARES project was first funded. Over the course of 25 years and five succeeding and successful InterPARES projects the global multidisciplinary research network was established. The current InterPARES Trust AI project focusses on the usage of AI to carry out archival functions for the control in the long term of all records, on any medium, and from any age, and to do so in such a way that the trustworthiness of the records remains protected and verifiable, and that the tools and processes are transparent, unbiased, equitable, inclusive, responsible, and sustainable.

Hrvoje Stančić is full professor with tenure and Chair of Archival and Documentation Sciences at the Department of Information and Communication Sciences as well as Vice- Dean for Organization and Development at the Faculty of Humanities and Social Sciences, University of Zagreb, Croatia. He was Director of the InterPARES Trust project's Team Europe (2013-2019). Currently, he is member of the Executive Committee at the InterPARES Trust AI project (2021-2026). He has published more than 80 scientific and professional papers and has presented at numerous conferences (full bibliography available at:
https://www.croris.hr/crosbi/searchByContext/2/5227). He edited the book Trust and Records in an Open Digital Environment (2021), published the book Digitisation (2009), co-authored Archival Science Dictionary: English-Croatian, Croatian-English (2015). He co-edited the book Heritage Live: IT Tools-based Heritage Management (2012) and six proceedings of the biennial international conference The Future of Information Sciences (INFuture). His research interests are long-term preservation of digital archival materials, preservation of authenticity and trustworthiness of digital records, blockchain, AI as well as digitisation. He is member of the board of Croatian Archival Society and President of the mirror technical committee for development of ISO/TC 307 Blockchain and distributed ledger technologies at the Croatian Standards Institute. In October 2021 he was awarded bronze medal at the 19th International Innovation Exhibition ARCA 2021 for his innovation TrustChain – A System for Preservation of Trustworthiness of the Digitally Signed Documents, and in October 2022 he was awarded silver medal at the 20th

International Innovation Exhibition ARCA 2022 for his innovation Blockchain-based diploma authentication system. He is an affiliate member of Centre for the International Study of Contemporary Records and Archives (CISCRA), Vancouver, Canada, and visiting professor at the Sorbonne University Abu Dhabi, UAE.

11:30
Enabling knowledge discovery as a means of data relevance

Artur Šilić
Director at Efficode Systems d.o.o., Zagreb

The projects ARTNET and Globe_EXCHANGE yielded CAN_IS (Croatian Artists Networks Information System) — an extensive database of entities and their relations about the artistic networks in the 20th and 21st centuries. Also, the projects brought dynamic data visualization web modules. We will show a short demonstration of the database and its visualization interfaces and discuss how to keep the existing data relevant for interpretation within the digital humanities community.

Artur Šilić is the director of Efficode Systems d.o.o., Zagreb, a company dedicated to delivering IT solutions which combine advanced text and data analysis methods with practical and robust software engineering. Before pursuing work in the private sector, he finished his PhD studies in the field of computer science at the Faculty of Electrical Engineering and Computing at the University of Zagreb, Croatia. He has participated in many academic, industrial, and cultural projects of which a number were EU-funded. For the past 15 years, he has been building systems which process data, many of which are continuously operating for many years and serving their users' needs. These include text classification systems, metadata extractors, large-scale clustering systems, search engines, databases, aggregation, and visualization systems. He has hands-on experience on software creation, natural language processing and machine-learning development, and team management.

11:45
Analyzing big visual data: challenges and perspectives

Nicola Carboni
Postdoctoral researcher –Visual Contagions project
Lecturer at the University of Geneva

In the history of representation, the illustrated press has been a major driving force, curating and disseminating ideas of visuality to artists and a wider audience. But how do we study the phenomenon? How can we use the digital to collect and process such a corpus? How can we organize it and make it reusable? How can we grasp the interaction and circulation of the visual at scale? To answer these questions, the presentation will introduce the pipeline, architecture, methods, and tools used by Visual Contagions. This project used IIIF to collect a corpus of illustrated periodicals published globally from 1890 to 1990. Using algorithms, we extracted pictures from their pages, compared them, and arranged them into clusters of image-types that

we analyzed using data science and graph data science methods. In the presentation, we will briefly introduce the project and discuss the technological choices, the analytical methods employed, the interoperability of the data, and the sustainability issues faced by such a demanding infrastructure.

Nicola Carboni is a Postdoctoral researcher within the Visual Contagions project and Lecturer at the University of Geneva, where he teaches courses on Digital Images, Digital Art History and Cultural Data. Previously Fellow at the Swiss Art Research Infrastructure - University of Zurich and Digital Humanities Fellow at the Harvard Center for Italian Renaissance Studies. He completed his PhD on the topic of Visual Heritage Documentation using 3D and Knowledge Graph, at the CNRS (National Research Center of France) where he was also previously appointed Marie Curie Fellow. He works on the intersection between knowledge graphs, big visual data and cultural interpretation.

12:00-12:45
Discussion
Invited speakers (moderated by Nikola Bojić)