

Списък на публикации, изобретения и други научно-приложни резултати на Максим Красимиров Гойнов за участие в конкурса за заемане на академичната длъжност „главен асистент“ по област на висше образование 4. Природни науки, математика и информатика, професионално направление 4.6. Информатика и компютърни науки, научна специалност Информатика (Системи за управление на цифрово културно съдържание), обявен в "Държавен вестник", бр. 102/01.12.2020 г.

1. Paneva-Marinova, D., **Goynov, M.**, Luchev, D.. Multimedia Digital Library as a Constructive Block in Ecosystems for Digital Cultural Assets. Digital Presentation and Preservation of Cultural and Scientific Heritage, Conference Proceedings, 7, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, 2017, ISSN:1314-4006, 31-40. [Линк](#)
2. Paneva-Marinova, D., **Goynov, M.**, Pavlov, R.. Enhanced and personalized learning experience in digital libraries. In the Proceedings of the 10th annual International Conference of Education, Research and Innovation, ICERI2017, 16th - 18th of November, 2017, Seville, Spain, 2017, ISBN:978-84-697-6957-7, ISSN:2340-1095, 1941-1950. [Линк](#)
3. Paneva-Marinova, D., Stoikov, J., **Goynov, M.**, Luchev, D., Pavlov, R., Pavlova, L.. Intelligent Data Curation in Virtual Museum for Ancient History and Civilization. Digital Presentation and Preservation of Cultural and Scientific Heritage, Conference Proceedings, 9, Institute of Mathematics and Informatics, BAS, 2019, ISSN:1314-4006, 131-143. [Линк](#)

Справки за публикациите по конкурса от Web of Science и Scopus

<p style="text-align: center;">Web of Science Page 1 (Records 1 -- 2) [1]</p>

Record 1 of 2

Title: Intelligent Data Curation in Virtual Museum for Ancient History and Civilization

Author(s): Paneva-Marinova, D (Paneva-Marinova, Desislava); Stoikov, J (Stoikov, Jordan); Goynov, M (Goynov, Maxim); Luchev, D (Luchev, Detelin); Pavlov, R (Pavlov, Radoslav); Pavlova, L (Pavlova, Lilia)

Source: DIGITAL PRESENTATION AND PRESERVATION OF CULTURAL AND SCIENTIFIC HERITAGE **Volume:** 9 **Pages:** 131-143 **Published:** 2019

Abstract: The virtual museum is an advanced system managing diverse collections of digital objects that are organized in various ways by a complex specialized functionality. The management of digital content requires a well-designed architecture that embeds services for content presentation, management, and administration. All elements of the system architecture are interrelated, thus the accuracy of each element is of great importance. These systems suffer from the lack of tools for intelligent data curation with the capacity to validate data from different

sources and to add value to data. This paper proposes a solution for intelligent data curation that can be implemented in a virtual museum in order to provide opportunity to observe the valuable historical specimens in a proper way. The solution is focused on the process of validation and verification to prevent the duplication of records for digital objects, in order to guarantee the integrity of data and more accurate retrieval of knowledge.

Accession Number: WOS:000487853900012

Language: English

Document Type: Proceedings Paper

Conference Title: 9th International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage (DiPP)

Conference Date: SEP 26-28, 2019

Conference Location: Bulgarian Acad Sci, Inst Math & Informat, Burgas, BULGARIA

Conference Host: Bulgarian Acad Sci, Inst Math & Informat

Author Keywords: Database Management; System Architecture; Functionality; Data Integrity; Knowledge Retrieval; Data Validation; Record De-duplication; Cultural Heritage

Publisher: INST MATHEMATICS & INFORMATICS, BULGARIAN ACAD SCIENCES

Publisher Address: 8, ACAD G BONCHEV STR, RM 271, SOFIA, 1113, BULGARIA

Web of Science Categories: Information Science & Library Science

Research Areas: Information Science & Library Science

ISSN: 1314-4006

eISSN: 2535-0366

Funding:

Funding Agency	Grant Number
Bulgarian Ministry of Education and Science under Cultural Heritage, National Memory and Social Development National Research Program	

This work was partially supported by the Bulgarian Ministry of Education and Science under Cultural Heritage, National Memory and Social Development National Research Program, approved by DCM No 577 of 17 August 2018.

Record 2 of 2

Title: ENHANCED AND PERSONALIZED LEARNING EXPERIENCE IN DIGITAL LIBRARIES

Author(s): Paneva-Marinova, D (Paneva-Marinova, Desislava); Goynov, M (Goynov, Maxim); Pavlov, R (Pavlov, Radoslav)

Edited by: Chova LG; Martinez AL; Torres IC

Source: 10TH INTERNATIONAL CONFERENCE OF EDUCATION, RESEARCH AND INNOVATION (ICERI2017) **Book Series:** ICERI Proceedings **Pages:** 1941-1950 **Published:** 2017

Abstract: The technology evolution of the modern age transformed the traditional libraries into digital ones which arose the need of efficient serve of the huge amount of information that now exists in the form of digitized content, as well as the provisioning of new workable applications (incl. e-learning, e-research, etc.). The focus of this paper is on the search of innovations especially in areas and subareas relevant to digital library data creative use/re-use and remix, reinterpretation, study, analysis, personalization, intelligent curation, adaptation, innovative tools for better access and exploiting of the rich and diverse digital cultural heritage in a sustainable way. The paper presents solutions for personalized observation and enhanced learning experience in digital libraries by special smart educational nooks. Main factors, related to the DLs user experience and content usability issues are considered. During the user experience design, the

users' needs, goals, preferences, and interests have been carefully studied and have become the starting point for the new DLs functionality development. Special attention is paid on the paradigm of modern educational games, providing the learners with a form of fun, motivating learning goals, high interactivity, and active immersion in the virtual learning world. The paper demonstrates several educational components, such as learning modules in a digital library for fashion objects, a smart learning corner in an iconographical art digital library, an ontology of learning analysis method and some educational games for art and culture, in which authors are co-developers.

Accession Number: WOS:000429975302007

Language: English

Document Type: Proceedings Paper

Conference Title: 10th Annual International Conference of Education, Research and Innovation (ICERI)

Conference Date: NOV 16-18, 2017

Conference Location: Seville, SPAIN

Author Keywords: Digital cultural ecosystems; digital library; engaged learner; creative thinking; learning analysis; learning-by-doing; learning-by-authoring; learning game; learning service; learning corner

KeyWords Plus: USABILITY; GAMES

Publisher: IATED-INT ASSOC TECHNOLOGY EDUCATION & DEVELOPMENT

Publisher Address: LAURI VOLPI 6, VALENICA, BURJASSOT 46100, SPAIN

Web of Science Categories: Education & Educational Research

Research Areas: Education & Educational Research

ISSN: 2340-1095

ISBN: 978-84-697-6957-7

Funding:

Funding Agency	Grant Number
Bulgarian NSF	DN02/06/15.12.2016

The research presented in this paper is partly funded by the Bulgarian NSF under the research project No DN02/06/15.12.2016 "Concepts and Models for Innovation Ecosystems of Digital Cultural Assets" under the tasks: T2.1 Research, development and application of new models and tools for analysis, understanding and interpretation of the digital cultural content of digital culture ecosystems and T2.2. Research, adaptation and application of tools for context-dependent use of digital cultural resources by digital culture ecosystems (for training purposes).

Scopus

EXPORT DATE:11 Jan 2021

Paneva-Marinova, D., Goynov, M., Luchev, D.
36458903600;36458539600;36458896900;

Multimedia digital library as a constructive block in ecosystems for digital cultural assets

(2017) Digital Presentation and Preservation of Cultural and Scientific Heritage, 7, pp. 31-40.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85095413247&partnerID=40&md5=1e28c7882fcae44cc26850d8059eeb92>

AFFILIATIONS: Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, Bulgaria

ABSTRACT: Libraries have always been a valuable source of knowledge. The technology evolution transformed the traditional libraries into digital

ones which arose the need of efficient serve of the huge amount of information that now exists in the form of digitized content. The focus of the monographic study "Multimedia Digital Library: Constructive Block in Ecosystems for Digital Cultural Assets. Basic Functionality and Services" is on the search of innovations especially in areas and subareas relevant to digital library data management and processing—innovative and creative tools for approaching cultural assets, applications and services for better access and exploiting of the rich and diverse digital cultural heritage in a sustainable way, intelligent curation, creative use/re-use and remix, reinterpretation, study, understanding, analysis, personalization, adaptation, semantics, etc. The research deals with important issues of handling data directly, affecting the economy (as presented by creative and re-creative industry), the public sector (cultural institutions—museums, libraries, galleries, etc.), education, and society as a whole. © 2017 Bulgarian Academy of Sciences, Institute of Mathematics and Informatics. All rights reserved.

FUNDING DETAILS: IO-03-03.

FUNDING DETAILS: Innovative Medicines Initiative, IMI.

FUNDING DETAILS: Bulgarian Academy of Sciences, BAS.

FUNDING DETAILS: 2015-2017.

FUNDING DETAILS: Magyar Tudományos Akadémia, MTA.

FUNDING DETAILS: Latvijas Zinatnu Akademijs, LZA.

FUNDING TEXT 1: The monographic study "Multimedia Digital Library: Constructive Block in Eco-systems for Digital Cultural Assets. Basic Functionality and Services" (Paneva-Marinova, Goynov, & Luchev, Multimedia digital library: Constructive block in ecosystems for digital cultural assets. Basic functionality and services, 2017) is developed by a team from the Institute of Mathematics and Informatics, Bulgarian Academy of Sciences (IMI-BAS) and presents its scientific research and developments at the innovation ecosystems of digital cultural assets, digital library management systems, tools and services. It is a result of several national and international projects, such as: 1) Research project "Concepts and Models for Innovation Ecosystems of Digital Cultural Assets" (Contract № DN02/06/15.12.2016 between IMI-BAS and the National Science Fund of Bulgaria (2016-2018) (CultEcoSys-Project, 2017); 2) Research project "Digital cultural heritage "North+": documenting, preserving and providing access to the cultural heritage in libraries, museums, archives and galleries in North and Central Bulgaria", awarded by grant within Programme BG08 "Cultural heritage and contemporary arts" co-funded by EEA FM (2015-2017), Coordinator: Regional Public Library "P. R. Slav-eykov", Veliko Tarnovo, Partners: IMI-BAS and others; 3) Joint research project "Development of software systems for multimedia and language technologies" (2015-2017) between IMI-BAS and Institute for Computer Science and Control at the Hungarian Academy of Sciences; 4) Joint research project "Digital libraries implementation in culture and education" (2016-2018) between IMI-BAS and Latvian Academy of Sciences, Latvia Culture college at the Latvian Academy of Culture; 5) CIP-ICT-PSP.2009.2.4 Project „EuDML - European digital mathematical library", EU Competitiveness and Innovation Framework Programme, ICT Policy Support Programme (2010-2013); 6) Research project "Development of digital libraries and information portal with virtual exposition "Bulgarian folklore heritage"", Contract №IO-03-03 between IMI-BAS and the National Science Fund of Bulgaria (2006-2012); 7) Research project "Digital libraries with multimedia content and its application in Bulgarian cultural heritage", Contract №8 between the IMI-BAS, and the State Agency for Information Technologies and Communications (2005-2006).

FUNDING TEXT 2: This work is partly supported by the research project №DN02/06/15.12.2016 "Concepts and Models for Innovation Ecosystems of Digital Cultural Assets" (CultEcoSys-Project, 2017), Competition for financial support of fundamental research - 2016 of the National Scientific Fund of Bulgaria. The project conducts fundamental research in the areas of computer science, information and communication technology and partially in

the humanities and social sciences with the goal of acquiring new knowledge on the fundamental causes of phenomena and observable facts in these areas without any direct commercial application or use. More specifically, the project is aimed at the search for and creation of new scientific knowledge in the areas of big data, massive data mining, data management, data processing, data analytics, data visualization, etc. The work is concentrated on developing conceptual models, methods and tools based on analysis, synthesis and summary of best practices and approaches in the studied areas. For this purpose, the team conduct extensive research and selection of approaches and solutions successful on a European and global scale in order to develop optimal and feasible conceptual models and methods of content presentation, analysis, understanding, interpretation, context-dependent use and sharing of content in ecosystems for digital culture in new ways and through innovative means for fuller delivery of knowledge to digital collections and archives of cultural artefacts.

EDITORS: Pavlov R., Stanchev P., Stanchev P.

PUBLISHER: Bulgarian Academy of Sciences, Institute of Mathematics and Informatics

CONFERENCE NAME: 7th International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage, DiPP 2017

CONFERENCE DATE: 7 September 2017 through 9 September 2017

CONFERENCE CODE: 164122

ISSN: 13144006

LANGUAGE OF ORIGINAL DOCUMENT: English

ABBREVIATED SOURCE TITLE: Digit. Present. Preserv. Cult. Sci. Herit.

DOCUMENT TYPE: Conference Paper

PUBLICATION STAGE: Final

SOURCE: Scopus

Scopus

EXPORT DATE:16 Jan 2021

Paneva-Marinova, D., Stoikov, J., Goynov, M., Luchev, D., Pavlov, R., Pavlova, L.

36458903600;57216655729;36458539600;36458896900;7003528124;57203547047;
Intelligent data curation in virtual museum for ancient history and civilization

(2019) Digital Presentation and Preservation of Cultural and Scientific Heritage, 9, pp. 131-144.

[https://www.scopus.com/inward/record.uri?eid=2-s2.0-](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85084231727&partnerID=40&md5=f383882f3da4a8546bc077673ea1b628)

[85084231727&partnerID=40&md5=f383882f3da4a8546bc077673ea1b628](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85084231727&partnerID=40&md5=f383882f3da4a8546bc077673ea1b628)

AFFILIATIONS: Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, Bulgaria;

Laboratory of Telematics, Bulgarian Academy of Sciences, Sofia, Bulgaria

ABSTRACT: The virtual museum is an advanced system managing diverse collections of digital objects that are organized in various ways by a complex specialized functionality. The management of digital content requires a well-designed architecture that embeds services for content presentation, management, and administration. All elements of the system architecture are interrelated, thus the accuracy of each element is of great importance. These systems suffer from the lack of tools for intelligent data curation with the capacity to validate data from different sources and to add value to data. This paper proposes a solution for intelligent data curation that can be implemented in a virtual museum in order to provide opportunity to observe the valuable historical specimens in a proper way. The solution is focused on the process of validation and verification to prevent the duplication of records for digital objects, in order to guarantee the integrity of data and more accurate retrieval of

knowledge. © 2019 Digital Presentation and Preservation of Cultural and Scientific Heritage. All rights reserved.

FUNDING TEXT 1: This work was partially supported by the Bulgarian Ministry of Education and Science under Cultural Heritage, National Memory and Social Development National Research Program, approved by DCM No 577 of 17 August 2018.

EDITORS: Paneva-Marinova D., Pavlov R., Stanchev P., Luchev D.

PUBLISHER: Bulgarian Academy of Sciences, Institute of Mathematics and Informatics

CONFERENCE NAME: 9th International Conference on Digital Presentation and Preservation of Cultural and Scientific Heritage, DiPP 2019

CONFERENCE DATE: 26 September 2019 through 28 September 2019

CONFERENCE CODE: 159420

ISSN: 13144006

LANGUAGE OF ORIGINAL DOCUMENT: English

ABBREVIATED SOURCE TITLE: Digit. Present. Preserv. Cult. Sci. Herit.

DOCUMENT TYPE: Conference Paper

PUBLICATION STAGE: Final

SOURCE: Scopus