

International Conference: IT in Cultural Heritage (IT-CH'2023)

October 24–26, 2023, Lublin University of Technology, Lublin, Poland

Conference Programme

1st day, October 24, 2023

Registration: 9:30-10:00, Lublin University of Technology, Faculty of Electrical Engineering and Computer Science, main building, room: E212

Start: 10:00, room: E212

10:00-10:30	Day 1. Opening ceremony: Prof. Wojciech Franus - viceRector of the Lublin University of Technology, Prof. Paweł Węgierek - Dean of the Faculty of Electrical Engineering and Computer Science of the Lublin University of Technology, Prof. Tomasz Zientarski – Head of the Department of Computer Science, Prof. Jerzy Montusiewicz – Head of the 3D Lab, Chair of the Scientific Committee Dr. Elżbieta Miłoś – Chair of the Organising Committee
Session 1. Moderator: Prof. Tomasz Zientarski	
10:30-10:45	Digital Silk Road in Central Asia in case of Uzbekistan; Mullaev Aziz Shomakhmatovich; Academy of Science Uzbekistan, Center for Contemporary History of Uzbekistan, Uzbekistan
10:45-11:00	The Silkroad3D project as a scientific and practical testing ground in the protection of cultural heritage; Miłoś Elżbieta; Lublin University of Technology, Department of Computer Science
11:00-11:15	The role of information technologies in the development of the cultural heritage of Uzbekistan; Hashimova Mukaddas Muradkhanovna; Samarkand State University, Uzbekistan
11:15-11:30	Digitalisation of the cultural heritage of the Polish community in the US – the project; Miłoś Marek, Montusiewicz Jerzy, Miłoś Elżbieta, Kęsik Jacek, Woś Ryszard (*), Urban Katarzyna (**); Lublin University of Technology, Department of Computer Science; (*) ECCC Foundation, Lublin. Poland; (**) John Paul II Catholic University of Lublin
11:30-11:45	Typical course of scanning and generating a 3D model - Faro Focus/Artec Eva scanner; Żyła Kamil, Kęsik Jacek; Lublin University of Technology, Department of Computer Science
11:45-12:00	Promotion of cultural diversity using VR - a case study; Skulimowski Stanisław, Barszcz Marcin, Montusiewicz Jerzy; Lublin University of Technology, Department of Computer Science
12:00-12:30	<i>Coffee break</i>
Session 2. Moderator: Prof. Marek Miłoś	
12:30-12:45	The role of Uzbek and Polish astronomers in the development of world astronomy and reflection of their activities in the museums of Samarkand; Ibragimov Shukhrat; Registan Ensemble, Samarkand(*) Uzbekistan



12:45-13:00	Integration of 3D laser scanning and photogrammetry to generate 3D models on the example of wooden religious buildings from Poland; Badurowicz Marcin, Kęsik Jacek, Montusiewicz Jerzy, Skulimowski Stanisław, Miłosz Marek; Lublin University of Technology, Department of Computer Science
13:00-13:15	From the history of medieval educational institutions of Samarkand (madrassahs and maktab). Issues of 3D digitisation of these objects; Urunkhodjaev Ulugbek; Registan Ensemble, Samarkand, Uzbekistan
13:15-13:30	Machine translation of literary texts into the Tajik language on the example of the story "A Trampler from Samarkand" by Ksawery Pruszyński; Warakowski Jerzy, (*) Kayumow Rahim, Montusiewicz Jerzy; Lublin University of Technology, Department of Computer Science; (*) Samarkand State of University
13:30-13:45	Providing a digital twin of wooden sacral monuments of the Carpathians on the example of the Saint Nicholas Church in Creaca (Romania); Kęsik Jacek, Montusiewicz Jerzy, Miłosz Marek, Żyła Kamil, Szymczyk Tomasz; Lublin University of Technology, Department of Computer Science
13:45-14:00	3D technologies for education: time to train the teaching staff of the future; Eshchanov Bakhodir, Arzikulov Zayniddin, (*) Khudayberganov Ravshonbek; Chirchik State Pedagogical University, Uzbekistan; (*) Center for increasing the social activity of students and pupils under the ministry of higher education, science and innovation of the Republic of Uzbekistan
14:00-15:00	<i>Lunch</i>
Session 3. Moderator: Dr. Jacek Kęsik	
15:00-15:15	Monetary reform of Mirzo Ulugbek and his role in trade on the Great Silk Road; Mukhamedova Dilbar Gafurjanovna; National University of Uzbekistan named after Mirzo Ulugbek, Uzbekistan
15:15-15:30	Method of developing the imagination of virtual existence in informatics teachers through 3D technologies; Ismadiyarov Abdurakhmon Karshibaevich, Dilfuza Makhmudova Melievna, Gayipova Gulshod Normatovna; Chirchik State Pedagogical University, Uzbekistan
15:30-15:45	Using photogrammetry to generate 3D models - a case study of a church bell and pieta (Chicago, USA); Kęsik Jacek, Montusiewicz Jerzy, Miłosz Marek, (*) Woś Ryszard; Lublin University of Technology, Department of Computer Science; (*) ECCC Foundation, Lublin. Poland
15:45-16:00	Printing traditional fabrics from Bukhara in Uzbekistan using copies of stamps - workshops for children; Montusiewicz Jerzy, Kęsik Jacek, Sałamacha Anna; Lublin University of Technology, Department of Computer Science
16:00-16:15	Evaluation of the quality of a digital 3D model using photogrammetry - a case study of objects from Cyprus; Montusiewicz Jerzy, Sałamacha Anna; Lublin University of Technology, Department of Computer Science
16:15-16:45	<i>Coffee break</i>
Session 4. Moderator: Prof. Jerzy Montusiewicz	
16:45-17:00	Digitization as a method of eternal saving cultural heritage objects - Church of St. Adalbert in Chicago case study; Miłosz Marek, Kęsik Jacek, Montusiewicz Jerzy, Miłosz Elżbieta, (*) Urban Katarzyna; Lublin University of Technology, Department of Computer Science; (*) John Paul II Catholic University of Lublin
17:00-17:15	Architectural monuments of Samarkand during the Temurids period and the prospect of 3D digitization of these objects; Safarov Asliddin; Samarkand International University of Tourism and Cultural Heritage "Silk Road", Uzbekistan
17:15-17:30	Technical aspects of 3D printing of copies of objects of material cultural heritage; Barszcz Marcin, Montusiewicz Jerzy, Korga Sylwester; Lublin University of Technology, Department of Computer Science
17:30-17:45	Spatial-Temporal Graph Convolutional Network for Zeibekiko dance sequences classification using motion capture data; Powroźnik Paweł, Skublewska-Paszkowska Maria, (*) Lemonari Marilena, Aristidou Andreas, Lublin University of Technology, Department of Computer Science; (*) University of Cyprus, Cyprus, Department of Computer Science



17:45-18:00	Possibilities of using digital models from 3D scanning to create virtual museums; Barszcz Marcin, Dziedzic Krzysztof, Skublewska-Paszowska Maria, Powroźnik Paweł; Lublin University of Technology, Department of Computer Science
18:30	Chata
	2nd day, October 25, 2023
	Start: 9:00, hall: E403b
	Session 5. Moderator Prof. Dilbar Mukhamedova
9:00-9:15	The importance of the infrastructures formed in Khorezm oasis in the Great silk Road and the specific features of this system; Abdullaev Utkir Ismailovich, Matkurbonov Omon Odilbekovich; Urgench State University, Uzbekistan
9:15-9:30	The history of the press in Khorezm and its role in the coverage of social and political life: history and analysis (1920-1945); Atamuratova Dilafruz Rashidovna; Urgench State University, Uzbekistan
9:30-9:45	Research on the history of the early medieval period of Khorazm from the 20-30's of the 20th century to the crossroads of the 21st century; Matkurbonov Omon Odilbekovich; Urgench State University, Uzbekistan
9:45-10:00	The role of Ayazqala and Qalajiqqala in the defence system of ancient fortresses of Khorezm; Satimov Baxodir, Matrasulov Alisher Ozodovich; Urgench State University, Uzbekistan
10:00-10:15	The role of Akchakhankala in the history of ancient Khorezm; Abdullaev Utkir Ismailovich, Matyakubov Toyirjon Sultanbaevich; Urgench State University, Uzbekistan
10:15-10:30	Architectural epigraphy of the Registan ensemble; Mansurova Dilafruz; Registan Ensemble, Samarkand, Uzbekistan
10:30-10:45	The role of the Silk Road in the international relations of Central Asia; Atakhodjaev Azimkhuja, Mullaev Aziz Shomakhmatovich; Academy of Sciences of the Republic of Uzbekistan, Uzbekistan
10:45-11:00	The role of language and communication in the informatization of cultural heritage; Khudayberganov Ravshonbek; Center for increasing the social activity of students and pupils under the ministry of higher education, science and innovation of the Republic of Uzbekistan
11:00-11:30	<i>Coffee break</i>
	Session 6. Moderator Dr. Aziz Mullaev
11:30-11:45	Mesh size reduction of digital 3D models of museum exhibits for online dissemination; Dziedzic Krzysztof, Montusiewicz Jerzy, Miłosz Marek; Lublin University of Technology, Department of Computer Science
11:45-12:00	The use of 3D printing to generate copies of cultural heritage models dedicated to the blind; Korga Sylwester, Montusiewicz Jerzy, Barszcz Marcin; Lublin University of Technology, Department of Computer Science
12:00-12:15	The concept of interactive 3D models of architectural objects for the blind; Korga Sylwester, Montusiewicz Jerzy, Zientarski Tomasz, Barszcz Marcin, Dziedzic Krzysztof; Lublin University of Technology, Department of Computer Science
12:15-12:45	<i>Visiting the Lab3D laboratory</i>
13:00-14:00	<i>Lunch</i>



	3rd day, October 26, 2023
	Start: 9:00, on-line session, CliZT, room 403d
	Session 7. Moderator Prof. Dilbar Mukhamedova; Dr. Elżbieta Miłośz
9:00- 10 minutes per paper	<ol style="list-style-type: none"> 1. Features of the socio-economic development of the Khorezm Khanate; Abdullaev Ilyas Sultanovich; Urgench State University, Uzbekistan 2. Economic and Mathematical Model of Container Block in the conditions of development of the Silk Road; Adilova Ziyoda, Ergasheva Z.; Tashkent State Transport University, Uzbekistan 3. Implemented works on the study and promotion of the historical-cultural heritage in the example of Khorezm region; Atamuratova Robiya Alimboevna; Urgench State University, Uzbekistan 4. Architecture of quarterly mosques in Samarkand and the prospect of 3D digitization of these objects; Boltaev Timur Khasanovich; Registan Ensemble, Samarkand, Uzbekistan 5. Digitization of areographic historical monuments; Buzrukov Muhammadikhon; Samarkand State University, Uzbekistan 6. Revival of pilgrim tourism on crossroad of the Great Silk Road (on the example of the Tashkent Oasis); Jumaeva Shoiria; Chirchik State Pedagogical University, Uzbekistan 7. The solitary life of wandering dervishes over monuments and Muslim shrines; Jumaniyozov Furqat Tojievich; Urgench State University, Uzbekistan 8. Historical and cultural objects of the Sufi order as a place of healing in the example of shrines of Sultan Uwais, Pakhlavon Mahmud and Yusuf Khamadani; Jumaniyozova Mamlakat Tojievna; Urgench State University, Uzbekistan 9. Problems, achievements and prospects for the development of 3D digitization of the cultural heritage of Samarkand; Kayumov Rakhim; Samarkand State University, Uzbekistan 10. Medieval cities of Khorezm in the Great Silk Road (VIII-X centuries); Khasanov Mardon; Urgench State University, Uzbekistan 11. Problems and prospects for 3 D Digitization of Aksaray (Amir Temur’s residence in Shakhrisabz); Khushvakov Nabi Olimovich; Shakhrisabz State Museum-Reserve, Uzbekistan 12. The way of life of the inhabitants of the Caltaminor culture; Madaminov Obidjon; Urgench State University, Uzbekistan 13. Use of virtual technologies in the creation of electronic educational tools; Makhmudova Dilfuza Melieвна, Gulshod Gayipova Normatovna; Chirchik State Pedagogical University, Uzbekistan 14. Cultural heritage features for digital tourism development in Central Asia (in case of Uzbekistan); Mullaev Aziz Shomakhmatovich, (*) Nargiza Rasuljanovna Ismatullayeva; Academy Science Uzbekistan, Center for Contemporary History of Uzbekistan, Uzbekistan; (*) Tashkent State University of Oriental Studies, Uzbekistan 15. From the history of the cultural heritage of Khorezm (on the example of “Ulli Khovli”); Nurullaeva Nodira Kadamovna, Kazakov Farkhod Sulaimonovich; Urgench State University, Uzbekistan 16. Shrine of Sheikh Mukhtar Vali and silk market; Ruzmetova Oydinoy Erkinboy qizi; Urgench State University, Uzbekistan 17. Protection of cultural heritage monuments in Khorezm region: issues and their solution; Samandarov Samandar; Urgench State University, Uzbekistan 18. The role of irrigation facilities and systems in the formation of the material culture of Khorezm (XIX century); Sharipov Umar Otajonovich; Urgench State University, Uzbekistan 19. Sharof Rashidov is a great public figure; Sulaymanova Shokhsanam; Chirchik State Pedagogical University, Uzbekistan 20. The social structure of the early Sak tribes of the Aral Sea region; Yusupov Axmadjon Shonazarovich, Ibragimov Ibragim; Urgench State University, Uzbekistan

