



3D DIGITAL SILK ROAD
(PPI/APM/2019/1/00004)
INTERNATIONAL ACADEMIC PARTNERSHIPS PROGRAMME



Lublin University of Technology

Department of Computer Science, Lublin University of Technology, Poland



National University of Uzbekistan



SAMARKAND STATE UNIVERSITY

Samarkand State University, Uzbekistan



Chirchik State Pedagogical University, Uzbekistan



Urgench State University, Uzbekistan

International Conference 3D Digital Silk Road Project (3DSR'2022)

***National University of Uzbekistan
Chirchik State Pedagogical University
Samarkand State University***

Tashkent, Chichik, Samarqand

Uzbekistan

7-9 September 2022

Conference programme



3D DIGITAL SILK ROAD
(PPI/APM/2019/1/00004)

INTERNATIONAL ACADEMIC PARTNERSHIPS PROGRAMME

Programme Committee:

Dilbar Mukhamedova, National University of Uzbekistan, Tashkent, Uzbekistan (Chair)

Jerzy Montusiewicz, Lublin University of Technology, Lublin, Poland (Vice-Chair)

Marek Miłosz, Lublin University of Technology, Lublin, Poland (Vice-Chair)

Anatoliy Sagdullaev, National University of Uzbekistan, Tashkent, Uzbekistan

Gafurjan Mukhamedov, Chirchik State Pedagogical I University, Chirchik, Uzbekistan

Bakhodir Eshchanov, Chirchik State Pedagogical University, Chirchik, Uzbekistan

Utkir Abdullaev, Urgench State University, Urgench, Uzbekistan

Akmal Akhatov, Samarkand State University, Samarkand, Uzbekistan

Rahim Kayumov, Samarkand State University, Samarkand, Uzbekistan

Zhannat Ismailova, State Museum of History of Uzbekistan, Tashkent, Uzbekistan

Samariddin Mustafokulov, Samarkand Museum Complex, Samarkand, Uzbekistan

Khonkul Samarov, Registan Ensemble, Samarkand, Uzbekistan

Nella Israilova, Kyrgyz State Technical University, Bishkek, Kyrgyzstan

Hamrokul Kayumov, Shahi Zinda Necropolis, Samarkand, Uzbekistan

Jacek Kęsik, Lublin University of Technology, Lublin, Poland

Marcin Barszcz, Lublin University of Technology, Lublin, Poland

Krzysztof Dziedzic, Lublin University of Technology, Lublin, Poland

Organizing Committee:

Bakhodir Eshchanov, Chirchik State Pedagogical University, Chirchik, Uzbekistan (Chair)

Dilbar Mukhamedova, National University of Uzbekistan, Tashkent, Uzbekistan (Vice-Chair)

Elżbieta Miłosz, Lublin University of Technology, Lublin, Poland (Vice-Chair)

Mariusz Dzieńkowski, Lublin University of Technology, Lublin, Poland

Magdalena Latkowska, Lublin University of Technology, Lublin, Poland



7 September 2022 y.

**Main building, rectorat National University of Uzbekistan
(NUUz, 4-University str. Almazar dist. Tashkent)**

9:00 – 9:30 Registration of participants

9:30 – 10:00 Opening ceremony

- **Prof. I. Madjidov** - Rector of the National University of Uzbekistan
- **Prof. P. Kacejko** - former Rector of Lublin University of Technology
- **Prof. G. Mukhamedov** - Rector of the Chirchik State Pedagogical University
- **Prof. B. Abdullaev** - Rector of Urgench State University
- **Prof. A. Akhatov** - Vice-rector of Samarkand State University
- **Dr. E. Milosz** - project manager, Lublin University of Technology

10:00 – 11:30 Session 1, Main building, rectorate NUUz

chairs: Prof. Dilbar Mukhamedova, National University of Uzbekistan, Uzbekistan
Prof. Jerzy Montusiewicz, Lublin University of Technology, Poland

- **Project "3D Digital Silk Road" – implementation and results.** Elżbieta Milosz, Dilbar Mukhamedova, Rahim Kayumov, Utkir Abdullaev, Bakhodir Eshchanov
- **Scientific and practical results of 3D digitization of the Silk Road cultural heritage** Marek Milosz, Elżbieta Milosz
- **Cooperation between Lublin University of Technology and Silk Road area universities.** Jerzy Montusiewicz, Piotr Kacejko, Mariusz Dzieńkowski
- **The role of the Great Silk Road in the development of cultural relations of Central Asia.** Anatoliy Sagdullaev
- **Practical work and scientific results of the research of the project "3D DIGITAL SILK ROAD" at the objects of the Samarkand Museum-Reserve.** Marek Milosz, Jerzy Montusiewicz, Rahim Kayumov, Samariddin Mustafokulov

11:30 – 11:45 Coffee break

**11:45 – 13:00 A visit to the museum of the History of the National University of Uzbekistan
(Dr. Doniyor Saidov, Dr. Qodirbek Maharov)**

13:00 – 14:30 Lunch

14:30 – 17:00 Session 2, Main building, rectorate NUUz

chairs: Prof. Utkir Abdullaev, Urgench State University, Uzbekistan
Prof. Marek Milosz, Lublin University of Technology, Poland



3D DIGITAL SILK ROAD
(PPI/APM/2019/1/00004)
INTERNATIONAL ACADEMIC PARTNERSHIPS PROGRAMME

- ***The usefulness of automatic translation of literary texts from Polish into Uzbek on the example of Trumpeter from Samarkand.*** Jerzy Warakomski, Rahim Kayumov, Jerzy Montusiewicz
- ***Scanning ceramic products and hats and creating virtual exhibitions within the framework of the "3D DIGITAL SILK ROAD" project.*** Jacek Kęsik, Raim Kayumov, Muhammadihon Bezrukov, Ravshan Amirov
- ***The contribution of the Project „ 3D Digital Silk Road” to the Development of the Scientific Potential of my personal scientific activity*** Bekjan Akhmedov, Muhammadihon Buzrukov
- ***Creating tools in virtual reality for researching cross culture competence.*** Stanisław Skulimowski, Jerzy Montusiewicz
- ***The concept of interactive 3D models for the blind.*** Jerzy Montusiewicz, Tomasz Zientarski, Sylwester Korga, Marcin Barszcz, Krzysztof Dziedzic
- ***Advantages of digitization of cultural heritage small objects using 3D technologies.*** Odiljon Rizayev, Mirsharof Qarshiyev

18:00 – Dinner, restaurant “Tashkentskiy dvorik”

8 September 2022 y.

**Main building, rectorate Chirchik State Pedagogical University
(CSPU, 140-Amir Temur str. Chirchik)**

9:00 – 10:00 Registration of participants

10:00 – 10:30 Welcome ceremony

- ***Prof. G. Mukhamedov*** - Rector of the Chirchik State Pedagogical University
- ***Prof. P. Kacejko*** - former Rector of Lublin University of Technology
- ***Prof. M. Miłosz*** – main coordinator, Lublin University of Technology

10:30 – 12:30 Session 3, Main building, rectorat CSPU

chairs: Prof. Bakhodir Eshchanov, Chirchik State Pedagogical University, Uzbekistan
Prof. Marek Miłosz, Lublin University of Technology, Poland

- ***Digitally enhance the appearance of petroglyphs.*** Sylwester Korga, Marek Miłosz, Piotr Wójcicki
- ***Great silk road pilgrimages: myth and truth.*** Shoira Jumaeva
- ***3D scanning of the interior of Juma Mosque in Khiva.*** Marek Miłosz, Jacek Kęsik, Marcin Badurowicz
- ***The basis of the digital history of Khiva (the project "3D DIGITAL SILK ROAD" in the example of the Khorezm region.)*** Utkir Abdullaev



3D DIGITAL SILK ROAD
(PPI/APM/2019/1/00004)
INTERNATIONAL ACADEMIC PARTNERSHIPS PROGRAMME

- ***Documenting of 3D scanning work in situ.*** Mariusz Dzieńkowski, Stanisław Skulimowski, Anna Salamacha
- ***3D technologies for education: time to prepare teachers of the future.*** Bakhodir Eshchanov, Adiz Israilov, Zayniddin Arzikulov
- ***Goals and prospects of 3D scanning for cultural heritage.*** Dilbar Mukhamedova

12:30 – 14:00 Lunch

14:00 – 17:00 **Session 4, Main building, rectorate CSPU**

chairs: Mr Rahim Kayumov, Samarkand State University, Uzbekistan,
Dr. Jacek Kęsik, Lublin University of Technology, Poland

- ***The use of 3D technologies in the educational process of Uzbekistan.*** Uchkun Kutliev
- ***Scanning of historical pilgrimage sites in Khiva.*** Mamlakat Djumaniezova
- ***Infrastructures formed in the Khorezm oasis on the Great Silk Road (on the example of Karavon saroy, Sardoba).*** Omon Matkurbonov
- ***Trade relations of Khorezm with the peoples of Eastern Europe in the IX-XI centuries.*** Mardonov Khasanov
- ***The possibility of scanning the historical object "Juma Masjid".*** Roviyaon Atamuratova
- ***Application of artificial intelligence methods in archeological artifacts.*** Doniyor Saidov, Shavkat Madrahimov
- ***The use of digital technologies in the preservation of historical heritage.*** Kozimbek Tukhtabekov, Dilbar Mukhamedova
- ***Choosing the structure of convolutional neural networks for object recognition.*** Kabul Khudaybergenov

19:00 – Dinner in “Bukhara” restaurant

9 September 2022 yer

7:00 – Severniy Vokzal Tashkent, session in Samarkand

14:00 – 15:30 Lunch

Closing of the conference, Registan Ensemble