



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



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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 importance of the Great Silk Road in the development of cultural relations of Central Asia.** Anatoliy Sagdullaev, Uktam Mavlanov
- **Practical work and scientific results of the study of the project "3D Digital Silk Road" on the Registan architectural ensemble,** Khonkul Samarov, Rahim Kayumov, Marek Milosz, Jerzy Montusiewicz

11:30 – 11:45 Coffee break and Multimedia Exhibition

“Uzbekiscanning: LUT’s Scientific Expeditions 2022”

**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 Miłosz, Lublin University of Technology, Poland

- [The usefulness of automatic translation of literary texts from Polish into Uzbek on the example of Trumpeter from Samarkand.](#) Jerzy Warakowski, Rahim Kayumov, Jerzy Montusiewicz
- [Scanning ceramics and headwear for creating virtual exhibitions within the 3D DIGITAL SILK ROAD project.](#) Jacek Kęsik, Rahim 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
- [Application of the random forest algorithm in different type features space.](#) Shavkat Madrakhimov, Doniyor Saidov, Qodirbek Makharov
- [The concept of interactive 3D models for the blind.](#) Jerzy Montusiewicz, Tomasz Zientarski, Sylwester Korga, Marcin Barszcz, Krzysztof Dziedzic
- [Advantages of the digitisation of small objects of cultural heritage by using 3D technologies.](#) Odiljon Rizayev, Mirsharof Qarshiyev
- [Practical work and scientific results of the study of the project "3D Digital Silk Road" at the facilities of the Samarkand State Museum-Reserve.](#) Rahim Kayumov, Samariddin Mustafokulov, Marek Miłosz, Jerzy Montusiewicz
- [Study and research of 3D technologies in SamSU.](#) Akmal Akhatov, Zafar Kurbanniyazov

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
- **[Revival of pilgrim tourism at a crossroad of the Great Silk Road - the example of the Tashkent oasis.](#)** Odiljon Ziyadullaev, Shoirra 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 - project "3D DIGITAL SILK ROAD" on the example of the Khorezm region.](#)** Utkir Abdullaev
- **[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
- **[Results and activities of the project "3D Digital Silk Road" on the example of Tashkent.](#)** Dilbar Mukhamedova, Kozimbek Tukhabekov
- **[Participation of SamSU in the implementation of the project "3D Digital Silk Road".](#)** Rahim Kayumov, Akmal Ahadov, Muhtor Nasirov

12:30 – 14:00 Lunch and Multimedia Exhibition

“Uzbekiscanning: LUT’s Scientific Expeditions 2022”

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 in Uzbekistan.](#)** Uchkun Kutliev
- **[Scanning historical pilgrimage sites in Khiva.](#)** Mamlakat Jumaniyozova



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- [The importance of the infrastructure formed in the Khorezm oasis in the Great Silk Road \(in the case of a caravanserai, a sardoba\).](#) Utkir Abdullaev, Omonboyx Matkurbonov
- [Trade relations of Khorezm with the countries of Eastern Europe in the 9th-11th centuries.](#) Mardon Khasanov
- [Possibilities of scanning the historical object Juma Masjid.](#) Roviyaon Atamuratova
- [Application of artificial intelligence methods in archeological artifacts.](#) Shavkat Madrahimov, Dilbar Mukhamodova, Doniyor Saidov, Qodirbek Makharov
- [The use of digital technologies in the preservation of historical heritage.](#) Dilbar Mukhamedova, Kozimbek Tukhtabekov
- [Choosing the structure of convolutional neural networks for object recognition.](#) Kabul Khudaybergenov
- [Feature sets informativeness with data gaps.](#) Shavkat Madrakhimov, Kodirbek Makharov, Doniyor Saidov.
- [Pahlavon Mahmud's pedagogical views.](#) Sardor Khodjanliyazov

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