

SPECIAL ISSUE



DIGITALIZATION - THE FUTURE OF MEDICINE

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29 FEBRUARY, 2024
"DIGITALIZATION - THE FUTURE OF
MEDICINE" II INTERNATIONAL STUDENT
CONFERENCE

ISSN: 3030-3451

MINISTRY OF HIGHER AND SECONDARY SPECIAL EDUCATION
OF THE REPUBLIC OF UZBEKISTAN

MINISTRY OF HEALTHCARE OF THE REPUBLIC
OF UZBEKISTAN

TASHKENT MEDICAL ACADEMY

**ABSTRACT BOOK OF THE II INTERNATIONAL STUDENT
CONFERENCE “DIGITALIZATION- THE FUTURE OF MEDICINE”**

TASHKENT-2024



O‘ZBEKISTON RESPUBLIKASI
OLIV VA O‘RTA MAXSUS TA‘LIM VAZIRLIGI

O‘ZBEKISTON RESPUBLIKASI SOG‘LIQNI SAQLASH VAZIRLIGI

TOSHKENT TIBBIYOT AKADEMIYASI

**“RAQAMLASHTIRISH-TIBBIYOT KELAJAGI” MAVZUSIDAGI II XALQARO
TALABALAR KONFERENSIYASI TO‘PLAMI**

TOSHKENT-2024




МИНИСТЕРСТВО ВЫСШЕГО И СРЕДНЕГО СПЕЦИАЛЬНОГО
ОБРАЗОВАНИЯ РЕСПУБЛИКИ УЗБЕКИСТАН

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ
УЗБЕКИСТАН

ТАШКЕНТСКАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ

**СБОРНИК МАТЕРИАЛОВ II МЕЖДУНАРОДНОЙ СТУДЕНЧЕСКОЙ
КОНФЕРЕНЦИИ «ЦИФРОВИЗАЦИЯ-БУДУЩЕЕ МЕДИЦИНЫ»**

Ташкент – 2024



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CREATION OF AUTOMATED MEDICAL WORKSTATIONS FOR MEDICAL PERSONNEL AND IMPLEMENTATION IN UZBEKISTAN

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Abstract: In the 21st century, due to the development of radiation diagnostic methods and information technology, new approaches to diagnosis, imaging, therapy, surgery, treatment and rehabilitation have been proposed in medicine. The rapid development of computer graphics methods has provided high-quality 3D visualization of the patient's anatomical structures

Keywords: *3D visualization, 3D animation, computer games, advertising, cinema, transformation, digitalization, diagnosis, angiography, digital technology*

Main part:

3D visualization of objects, 3D animation are widely used in various fields such as architecture, industry, medicine, computer games, educational materials, advertising, film and video production.

3D-visualization provides an opportunity to show the (still intangible) features and advantages of an object. Virtual tours of such an object is a powerful marketing tool, it is the strongest means and methods of realization, giving advantages in overcoming objections and misunderstandings. All this helps us to give an objective assessment of the essence and is the need for transformation and digitalization of the traditional health care system.

The relevance of the topic is the introduction of 3D visualization of objects in medicine, which are related to the universal digitalization in medicine and accurate diagnosis of various diseases at an early stage, which accelerates the process of digital transformation of the medical field.

The purpose of visualization is the diagnosis of pathological conditions or preparation for medical intervention, and sometimes the representation of the functions of individual organs or tissues.

The purpose of this paper is to familiarize with the ALTIMA F-100 angiograph from Allengers and to actively implement in the therapeutic and preventive process of digital technologies in the clinics of the new Uzbekistan.

Cardiovascular diseases caused by atherosclerotic lesions of the main arteries (coronary, cerebral) are the main cause of death worldwide: for no other reason do not die annually as many people as from CVD.

WHO estimates that 26.9 million people died from CVDs in 2022, accounting for 31% of all deaths worldwide. 85% of these deaths were due to MI and stroke, and more than 75% of deaths from CVDs occur in low- and middle-income countries, almost equally among men and women. Of the 20 million deaths from non-communicable diseases before the age of 70, 82% occur in low- and middle-income countries, and 37% are caused by CVDs.

Angioplasty, also known as balloon angioplasty and percutaneous transluminal angioplasty (PTA), is a minimally invasive endovascular procedure used to dilate narrowed or blocked arteries or veins, usually to treat arterial atherosclerosis.

- A deflated balloon attached to a catheter (balloon catheter) is passed through a guide wire into the narrowed vessel and then inflated to a fixed size. The balloon causes the blood vessel and surrounding muscle wall to dilate, providing improved blood flow. A stent may be inserted during ballooning to ensure that the vessel remains open, and then the balloon is deflated and removed. Angioplasty has come to include all types of vascular interventions that are commonly performed percutaneously.

- - Hospital Management System (HMS) or Hospital Information System (HIS) from Allengers Infotech will make hospital management paperless and save time. In other words, HMS consolidates all the resources of a hospital into a single software system.

- - The system aims to offer high-end solutions when it comes to managing not only clinical but also other interdisciplinary and back office activities.

- - The system offers a fully configured, advanced modular or complete web-based package with exceptional anywhere and anytime login capabilities, patient record management, emergency handling that optimize all aspects of the hospital. Почему Allengers HMS (Clarity)?

- All-in-one solution provider
- Secure information sharing
- Reduced labor force
- Saves time, facilitating timely decision making
- Requires minimal maintenance
- Built with the latest technology
- Clear and user-friendly
- Document Management Solution
- Improved operational efficiency
- Modeling of orthopedic shoes and earmolds, etc.

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