

НАУКОВО-ТЕХНІЧНА КОНФЕРЕНЦІЯ МОЛОДИХ ВЧЕНИХ

Актуальні проблеми інформаційних технологій



АРІТ



19-20 жовтня 2023 року

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

КИЇВСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ
ІМЕНІ ТАРАСА ШЕВЧЕНКА

**НАУКОВО-ТЕХНІЧНА
КОНФЕРЕНЦІЯ МОЛОДИХ
ВЧЕНИХ
«Актуальні проблеми інформаційних
технологій»**

19-20 жовтня 2023 року

Матеріали доповідей

Київ 2023

<i>Makhovych O.I., Makhovych I.A.</i> REVOLUTIONIZING COMPUTER SCIENCE EDUCATION: THE POWER OF GAMIFICATION	53
<i>Makhovych I.A., Zhlali Z.T.</i> VIDEO GAMES AS TOOLS FOR SELF-IMPROVEMENT AND LEARNING ENHANCEMENT	56
<i>Makhovych I.A., Portiana P.B.</i> NAVIGATING THE AI REVOLUTION: UNRAVELING THE COMPLEXITY OF ARTIFICIAL INTELLIGENCE	59
<i>Дахно Н.Б., Черкун Є.С.</i> ШТУЧНИЙ ІНТЕЛЕКТ: ВИКЛИК ЧИ НОВІ МОЖЛИВОСТІ?	61
<i>Труш О.В., Телегуз А.</i> ДОСЛІДЖЕННЯ ТЕХНОЛОГІЇ БЛОКЧЕЙН ТА ЇЇ ВПЛИВ НА РИНОК КРИПТОВАЛЮТИ	63
<i>Прохоренко М.В.</i> АВТОМАТИЗАЦІЯ ДОКУМЕНТООБИГУ В ТЕРИТОРІАЛЬНИХ ГРОМАДАХ УКРАЇНИ	65
<i>Дахно Н.Б., Павленко О.В.</i> ПЕРСПЕКТИВИ ВИКОРИСТАННЯ НЕЙРОННИХ МЕРЕЖ	67
<i>Лещенко О.О., Полюхович А.І.</i> ВИКОРИСТАННЯ СИСТЕМ ШТУЧНОГО ІНТЕЛЕКТУ ДЛЯ ЗМІНЕННЯ ТА ГЕНЕРУВАННЯ ГОЛОСУ ВІДЕО ТА ФОТОГРАФІЙ	69
<i>Радько М.</i> РОЗРОБКА ТА АНАЛІЗ ВЕБ-САЙТУ, СТВОРЕНОГО ЗА ДОПОМОГОЮ ТЕХНОЛОГІЙ ШТУЧНОГО ІНТЕЛЕКТУ	71
<i>Венгер С.А.</i> ТЕНДЕНЦІЇ РОЗВИТКУ ВІРТУАЛЬНОЇ І ДОПОВНЕНОЇ РЕАЛЬНОСТІ В ОСВІТІ ЗА ДОПОМОГОЮ ІНТЕРАКТИВНИХ КНИГ: ВИКОРИСТАННЯ ШТУЧНОГО ІНТЕЛЕКТУ ДЛЯ ДИСТАНЦІЙНОЇ ОСВІТИ	73
<i>Духновська К.К., Красноп'яров П.К.</i> ПРОГРАМНІ ЗАСОБИ АВТОМАТИЧНОГО ФОРМУВАННЯ СЛОВНИКА УКРАЇНСЬКОЇ МОВИ	75
СИСТЕМИ ТА МЕТОДИ ЗАХИСТУ КОМП'ЮТЕРНОЇ ІНФОРМАЦІЇ	77
<i>Герасименко О.Ю., Гніздовський М.О.</i> ПІДХОДИ ДО ЗАБЕЗПЕЧЕННЯ БЕЗПЕКИ В DEVSECOPS	78
ТЕОРЕТИЧНІ АСПЕКТИ КОМП'ЮТЕРНИХ НАУК	81
<i>Дахно Н.Б., Мулико В.В.</i> ВИКОРИСТАННЯ ГРАФІВ В ЛОГІСТИЦІ МЕРЕЖЕВОГО ОБЛАДНАННЯ ТА ТЕОРІЇ МЕРЕЖ	82
ІНТЕРНЕТ РЕЧЕЙ	84
<i>Лещенко О.О., Трикоз Я.В.</i> АНАЛІТИЧНА ПЛАТФОРМА AWS ДЛЯ ІНТЕРНЕТУ РЕЧЕЙ	85
<i>Старкова О.В., Ничипорук Д.В., Минюк П.С.</i> ВПРОВАДЖЕННЯ ІОТ-РІШЕНЬ ДЛЯ СИСТЕМ КОНТРОЛЮ ТА УПРАВЛІННЯ ДОСТУПОМ	88
<i>Лещенко О.О., Крижановський О.І.</i> ПРОБЛЕМИ ВИКОРИСТАННЯ ІНТЕРНЕТУ РЕЧЕЙ	90
ІМЕННИЙ ПОКАЖЧИК	92

УДК 37.026.6

¹ **I. A. Makhovych**

Senior Lecturer of the Department of Philology and Translation

² **Z. T. Zhlali**

Student

^{1,2} *Kyiv National University of Technologies and Design, Kyiv*

VIDEO GAMES AS TOOLS FOR SELF-IMPROVEMENT AND LEARNING ENHANCEMENT

Modern technological development is one of the foremost factors of our life being changed so swiftly year after year and the perspectives of which are unforeseeable. Back in the days of recent old it would be almost fictional for us to have a phone with the potential of a computer or a laptop handling its computing power much surpassing one of the most sophisticated of contraptions that needed rooms of space to be placed. And so, humankind, by accumulating this much of resources and developing them to this height, has been reaching new horizons of self-improvement and education in many different ways, one of which is media that is not so obviously participating in the aforementioned process — video games. In this discussion, the focus is on elucidating how exactly pleasure can be mingled with self-perfection. What is important to note, we are about to cover not games which were initially intended to be educational, but the ones we would start without an intention to learn something new.

What is the format of a story to be fascinating and persuasive in its try to engage the one experiencing it into the plot? This could be found on the pages of a book or displayed on a screen, as seen in a film adaptation. However, the new way of building a narrative is an exploration that transcends traditional storytelling mediums, prompting us to reconsider the traditional methods. Evidence from a survey conducted by the International Journal of Human-Computer Interaction suggests a compelling alternative-narrative-driven video game. This dynamic medium not only captivates but also stimulates critical thinking skills and decision-making abilities in players, ushering in a paradigm shift in how we engage with and shape stories [3].

Good examples of this are «The Valiant Hearts» [8] and «This War of Mine», both of these games are the reflection of war. The former is a historically accurate portrayal of the blood-spangled companies of WW1, with some fictional elements included [6]. During the war, civilians are depicted, with player decisions influencing the fate of the characters. All plans are good when executed well, and these two were executed verily as they should have been. As a result, they are highly respected, with 'This War of Mine' even being included in Polish school programs. Video games have a unique ability to transport players through historical events, foreign countries, and imaginary universes. They do not replace literature or cinema but serve as valuable supplements to them [5].

Seeing the world from home takes on an unparalleled dimension through the 'Assassin's Creed' series, offering not only a delightful means of leisure but also an educational odyssey. 'The Assassin's Creed' has always been a great way to spend

leisure time by experiencing semi-historical stories [1]. You can gain more education by using the so-called 'Codex,' where paragraphs are filled with brief data about many historical events and personalities. But the most astonishing aspect of these games is how they recreate cities and countries during some of the most interesting times in their development. To dream of the sand of ancient Egypt, walk the streets of Paris engulfed by the Revolution of 1789, take part in signing the Declaration of Independence, or contemplating the beauty of the Italian Renaissance among other experiences, is just a fraction of what awaits across more than 20 titles. The attention to detail in Ubisoft's creations is most deserving of praise, particularly for its naturalism. Furthermore, even universities in America and some European countries use the specialized 'Photo mode' to show their students what humanity can no longer witness, as these times have long passed. [4].

“Minecraft” is a game that needs no introduction - a construction game where players are free to create almost anything that comes to mind, from combining ingredients to create materials to entire cities. However, it may not be widely known that it is used in many educational institutions. In fact, this trend started when Clemson University embraced it [2]. Microsoft acquired the company of Minecraft creator Marcus Persson and developed a new version, Minecraft: Education Edition, specifically tailored for educational purposes [7].

While we have only shared a small selection of examples from the video game industry, the overarching message throughout our writing is clear: games are increasingly becoming a crucial part of education. They are highly accessible, user-friendly, and enjoyable, making them ideal tools for learning.

References

1. Assassin's Creed Franchise | Ubisoft (EU / UK). (n.d.). Ubisoft | Ubisoft Offizielle Webseite. <https://www.ubisoft.com/en-gb/game/assassins-creed>
2. Fung, K., Smith, S., & Gandolfi, E. (2022). Minecraft Education Edition in foreign language education: Pre-service teachers' reasons for acceptance and integration. *Journal of Language Teaching*, 2(10), 17–28. <https://doi.org/10.54475/jlt.2022.013>
3. Pasqualotto, A., Parong, J., Green, C. S., & Bavelier, D. (2022). Video game design for learning to learn. *International Journal of Human–Computer Interaction*, 1–18. <https://doi.org/10.1080/10447318.2022.2110684>
4. Photo Mode in Assassin's Creed Valhalla | Ubisoft Help. (n.d.). Ubisoft | Ubisoft Offizielle Webseite. <https://www.ubisoft.com/en-gb/help/assassins-creed-valhalla/article/photo-mode-in-assassins-creed-valhalla/000079791>
5. Shukla, A. (2022, June 30). Polish high schools adding This War of Mine to curriculum. *Game Rant*. <https://gamerant.com/this-war-of-mine-game-polish-high-schools/>
6. This War of Mine. (n.d.). This War of Mine – This War Of Mine provides an experience of war seen from an entirely new angle. For the very first time you do not

play as an elite soldier, rather a group of civilians trying to survive in a besieged city.
<https://www.thiswarofmine.com/>

7. University students learn to communicate, create, and collaborate with 3d gaming software. (n.d.). Minecraft: Education. <https://education.minecraft.net/en-us/blog/university-students-learn-to-communicate--create--and-collaborate-with-3d-gaming-software>

8. Valiant Hearts: The Great War™ / Soldats Inconnus. (n.d.). Welcome to Steam. https://store.steampowered.com/app/260230/Valiant_Hearts_The_Great_War__Soldats_Inconnus__Mmoires_de_la_Grande_Guerre/

Наукове видання

**НАУКОВО-ТЕХНІЧНА КОНФЕРЕНЦІЯ
МОЛОДИХ ВЧЕНИХ
«Актуальні проблеми інформаційних технологій»**

19-20 жовтня 2023 року

Матеріали доповідей

Формат 60x84^{1/16}. Ум. друк. арк. 3,3. Наклад 40. Зам. №219-8446.
Гарнітура Times New Roman. Папір офсетний. Друк офсетний.
Підписано до друку 27.10.23

Видавець і виготовлювач
ВПЦ «Київський університет»
б-р Т. Шевченка, 14, м. Київ, 01601,
(044) 239 32 22; (044) 239 31 72; тел./факс (044) 239 31 28
<http://vpc.univ.kiev.ua>

Свідоцтво суб'єкта видавничої справи ДК № 1103 від 31.10.02