

ARTIFICIAL INTELLIGENCE GLASSES IN MEDICINE

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Abstract. *Artificial intelligence is currently serving as a unique tool for the development of many fields. In particular, it is playing a significant role in the advancement of medicine. An example of this is artificial intelligence-enabled glasses used in ophthalmology. These glasses are comfortable for patients of all ages, and their lenses are equipped with specialized sensors. They accurately measure distances to various distant and nearby objects in a short time.*

Keywords: *Lens, liquid crystal, focus, electronics, glasses, object, technology, telemedicine.*

Аннотация. *В настоящее время искусственный интеллект служит уникальным инструментом в развитии многих областей. В частности, он имеет огромное значение в развитии медицины. Примером тому являются очки с искусственным интеллектом, используемые в офтальмологии. Такие очки удобны для пациентов разного возраста, а их линзы оснащены специальными сенсорами. Они точно измеряют расстояния до различных, дальних и близких объектов за короткое время.*

Ключевые слова: *Линза, жидкий кристалл, фокус, электроника, очки, объект, технология, телемедицина.*

Artificial intelligence is a field of science and technology that creates programs capable of performing unique tasks that are humanly possible. Artificial intelligence creates computer programs that the human brain can execute. Therefore, they can also be called intelligent machines. They possess characteristics that contribute to the advancement of science and technology. Let's take a look at smart glasses with such features.

Smart glasses are now widely used in a variety of fields, including medicine. They can be used as a display or external monitor. They can also be used in education, simulation, for measuring vital signs, obtaining images, test results, video recording, digital photo documentation, telemedicine, and many other interactive applications.

Smart glasses offer a variety of unique digital health features. For example, DeepOptics has developed Omnifocals, glasses with dynamic focusing for distance vision. The lenses of these glasses are equipped with focus sensors (sensors, detectors, or receivers) that quickly and accurately measure the distance to an object. These lenses

consist of three layers of liquid crystals that transmit signals through specialized sensor-based electronics. They are capable of altering optical refraction to correct vision in various situations.

These smart electronic glasses are capable of seeing objects both near and far with high clarity. These glasses perform unique functions, effectively and efficiently solving problems faced by patients of all ages, especially millions of middle-aged and elderly people. This technology thus provides a very high level of transparency and eliminates the need for replacement glasses in the event of vision deterioration.

American researchers have developed smart glasses for people with disabilities that allow them to perceive their surroundings. Thanks to them, housebound patients will be able to see the world through the eyes of a person wearing glasses.

In recent years, artificial intelligence-based programs have made significant advances, bringing technologies once considered science fiction to life. AI-powered glasses are one such advancement. These future eyewear technologies may be able to perceive the world around us and change how we interact with it, making them the latest trend. These glasses are comprised of algorithms that enable them to perform everything from translating languages to providing real-time information about the world around us.

According to online sources, these glasses are also known as smart glasses or augmented reality glasses. They are a type of wearable technology integrated with artificial intelligence capabilities. These glasses use various sensors, cameras, and display systems to provide real-time information and augmented capabilities. The algorithms and AI technologies built into these glasses are capable of object recognition. They also perform functions such as natural language processing and augmented reality effects.

These glasses can now be used in telemedicine. In this case, doctors can provide recommendations while remotely examining bedridden patients. The smart glasses consist of a camera and microphone that transmit images and sounds from the surrounding environment. The patient sees this information on their phone or tablet.

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