

Oleksii Potapov

V.S. Chernyshenko, research supervisor

M.L. Isakova, language adviser

SHEI “National Mining University”, Dnipropetrovsk

### **The New Vision of Augmented Reality**

Nowadays the augmented reality became more and more popular among the people. Today's augmented reality is one of the main technological trends. It began penetrate in the human minds since the second part of the most popular sci-fi franchise “Back to the Future” in 1989. In the episode when holographic shark showed up unexpectedly in the Jaws-19 trailer. We didn't think about such conception as “augmented reality” but already imaged it in movies.

So, Augmented Reality is a technology that places some data or pictures on the top of people's view of the world around. The development of this trend was in research labs for years and in use in industry just for several years. Augmented Reality became popular in the consumer market in 2009. Per se term “Augmented reality” typically conjures the idea of using a camera to create visual overlays through the viewfinder. The main idea is called "mediated reality" in which a view of reality is modified by a computer. And therefore, the technology's functionality raises the perception of reality. Per contra, the virtual reality helps to replace the real world with simulated one. With the help of augmented reality technology the information about the surrounding real world becomes interactive and digitally manipulable.

Take for instance the Layar project. It is a Dutch company founded in 2009. The browser allows users to find various items based upon augmented reality technology. There is Dutch magazine where on each page you can scan and find several links on video, music, or web-pages. Also you can create your own pages with interactive buttons, video-streaming and pictures on it.

In June 2012, Google have presented their own product named “Google Glasses” which can help you to find your location, check the time, take photos and share them with your friends. Google lets developers space for writing new ingenious apps for it. Matt Rosoff promised that Google Glasses would be on sale approximately one year after the test version for developers - early 2014.

Also some applications will help for single eye blindness people. A team of engineers from University of Yamanashi in Japan has constructed exactly this type of device. They have made a kind of augmented reality goggles that artificially produces a depth perception feeling in the healthy eye of the wearer.

In November 2012 the interesting project came out called “Ingress” by Niantic Lab. The main idea is that the game tries to get you to move around. The location is alternative reality. First, you choose the “fraction” - either Enlightened or Resistance. Then it requires you to collect the certain “Exotic Matter”, some mysterious energy. According to ReadWrite magazine, it is believed to be some sort of structured data. So, this matter can be found and collected just by walking around the streets, near the monuments or some other architecture. The objective is to lead your team to control as much territory as possible.