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GOOGLE PROJECTS: SMART CONTACT LENS MONITORING BLOOD SUGAR, AUTONOMOUS CAR

Проекты Гугл: линза-глюкометр, беспилотный автомобиль

Nowadays the humankind has managed to achieve superiority over a great deal of problems people had been suffering for centuries. Fortunately, a number of scientists continue to erase problems harmful to people. Google is the company exerting itself to the utmost extent to change the world for the better and help as much people as possible. In our research such Google projects as a Smart contact lens monitoring blood sugar and an Autonomous car have been analyzed.

The main *goal* of the research is to examine two Google projects from a humanistic standpoint: how the greatest company focuses on the most basic wants of a person to help them to overcome difficulties in need.

A Smart contact lens monitoring blood sugar

Diabetic patients should have their blood glucose levels measured regularly. Even with the most modern and convenient glucose meters you still need to prick your finger. Researchers from Ulsan National Institute of Science & Technology in South Korea have developed a device that does away with the need for injections. They have combined a glucose meter with contact lenses. Soft lenses with flexible microchips measure glucose levels in the tear fluid in real time. If there is too much glucose, the LED display in the lens begins to glow, and it can be adjusted to shine either into the eye or outwards. Glucometer lenses have only been tested on rabbits and they have not caused them any discomfort. They measure sugar levels continuously, so that the variability of 'tear' data can be brought to a realistic value.

An Autonomous car

An Autonomous car is a vehicle capable of sensing its environment and operating without human involvement. A human passenger is not required to take control of the vehicle at any time, nor is a human passenger required to be present in the vehicle at all. An autonomous car can go anywhere a traditional car goes and do everything that an experienced human driver does. Autonomous cars rely on sensors, actuators, complex algorithms, machine learning systems, and powerful processors to execute software.

What are the benefits of autonomous car?

The scenarios for convenience and quality-of-life improvements are limitless. The elderly and the physically disabled would have independence. If your kids were

at summer camp and forgot their bathing suits and toothbrushes, the car could bring them the missing items. You could even send your dog to a veterinary appointment.

But the real promise of autonomous cars is the potential for dramatically lowering CO2 emissions. In a recent study, experts identified three trends that, if adopted concurrently, would unleash the full potential of autonomous cars: vehicle automation, vehicle electrification, and ridesharing.

By 2050, these «three revolutions in urban transportation» could: reduce traffic congestion (30% fewer vehicles on the road), cut transportation costs by 40% (in terms of vehicles, fuel, and infrastructure), reduce urban CO2 emissions by 80% worldwide, provide those who can't drive – the blind, the disabled, the mentally vulnerable – with a very attractive alternative solution to taxis and public transport, reduce crashes, prevent injuries, save lives, improve walkability and livability.

The *results* of the research are the following:

- 1. Google projects are going mainstream as the idea of Global Humanism in the XXIst century is becoming increasingly actual.
- 2. The modern social and cultural situation is giving birth to Global Humanism aimed at the human activities, and culture in all its aspects to be more and more survival-oriented in the environment and the renaissance and support of the humanistic social values created by the humankind.

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PROFESSIONAL SELF-DEVELOPMENT OF A MANAGER IN A SOCIO-CULTURAL ENVIRONMENT

Профессиональное саморазвитие менеджера в социокультурной среде

Professional self-development of a manager in a socio-cultural environment is an important aspect of a successful career. In today's rapidly changing business world, managers must constantly develop their skills and knowledge in order to be effective and progress in their work with people.

Thus, the purpose of the research is to study the role of professional selfdevelopment of a manager in a socio-cultural environment and to identify the most effective methods of self-development.

The term "self-development" is defined, as the process of self-initiated and directed development of skills and knowledge to improve the efficiency of the organization's resource management.