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ARDUINO PLATFORM. ROBOTS BASED ON ARDUINO student Nichiporuk A.V. scientific supervisor – lecturer Samusevich A.S. Belarusian National University of Technology Minsk, Belarus

As technology continues to advance at an unprecedented rate, robotics is becoming an increasingly popular field of study at universities around the world. Robotics is a field that includes the design, construction, and operation of robots. These robots can be used for a wide range of applications, from manufacturing to healthcare. Arduino, a popular open source electronic platform, is often used to control and program these robots. In this post, we will take a closer look at Arduino-based robots and explore their capabilities.

Arduino is an open source electronic platform for creating digital devices and interactive objects. The platform consists of a microcontroller, which is a small computer that can be programmed to control various components such as sensors, motors, and lights. The Arduino is used by hobbyists and professionals alike and is an affordable and affordable way to experiment with electronics and robotics.

Building an Arduino-based robot can be a challenging but rewarding experience. To build a robot, you need to have basic knowledge of electronics, programming, and mechanics. You will also need various components such as motors, sensors and controllers. There are many online resources available that can help you get started building your Arduino-based robots.

Once you've built your Arduino-based robot, you'll need to program it to perform the tasks you want. Arduino programming is done using a programming language similar to C++.

Arduino-based robots have a wide range of applications in various fields. Some of the more common uses for these robots include:

1. Production. Arduino-based robots are used in manufacturing to perform tasks such as welding, assembly, and painting. They can complete these tasks faster and more accurately than humans, which can help improve efficiency and reduce costs.

2. Health care. Arduino-based robots are used in healthcare for tasks such as surgery and patient monitoring. They can be used to perform operations with greater precision and accuracy than human surgeons, which can lead to better patient outcomes.

3. Research. Arduino-based robots are used in space and deep seas exploration to explore environments that are inaccessible or dangerous to humans. They can collect data and perform tasks in these environments without putting human lives at risk.

Arduino-based robots are an exciting and fast-growing area of study for tech students. They offer a wide range of applications and have the potential to

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transform many industries. However, building and programming these robots requires a deep understanding of electronics, programming, and mechanics. With the right skills and knowledge, engineering students can play an important role in the development of these exciting new technologies.

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QUANTUM COMPUTERS AND THEIR POSSIBILITIES student Peshko D.A. scientific supervisor – lecturer Samusevich A. S. Belarusian National University of Technology Minsk, Belarus

The first quantum computer was created by a research team led by physicist David Deutsch at the University of Oxford in 1985. Deutsch's proposal for a quantum computer was based on the theory of quantum mechanics, which describes the behavior of particles at the atomic and subatomic level.

Quantum computers represent a significant breakthrough in the field of computing. Unlike classical computers, quantum computers operate on the principles of quantum mechanics, which allows them to perform certain computations much faster and more efficiently.

A quantum computer is a device that uses the principles of quantum mechanics to perform computations. It uses quantum bits or qubits, which can