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RESEARCH ON CREATING A WIRELESS MACHINE CONTROL SYSTEM THROUGH ROBOTIZATION AND AUTOMATION OF TECHNOLOGICAL PROCESSES

Kulmuratova Aliya Janabay qizi
Student of Nukus Mining Institute

Abstract:

The evolution of the smartest technology in recent years in robotization and automation of technological processes is rapidly developing in the Republic of Uzbekistan. This is software works on the scheme installed in the system. In the automation of robotization processes, the technological process can be carried out in a clearly defined form and in the scheme of the technological system environment with precision with established procedures and references this system is used to make decisions. The limitation of the automated system of robotization processes is that it is not possible to study the problems that arise on the basis of technical errors in the scheme of the technological system. If it involves decision-making supported by knowledge-based software, the automated system design will continue to accept technical variable values over time. High level and interconnected supply chains are now faced with producers reducing production and in the production activity, the task of increasing the complexity of the product is considered. Therefore, it is necessary to study the need to change and adapt at all stages of value formation we need to consider the implementation processes as soon as possible. The theory of self-technological optimization is a positive method and system dealing with supply uncertainty and unexpected delays including circuits, devices and processes. It also increases production efficiency and system increases the stability and productivity of networks. This article is about automation processes in a robotic system in technological processes Self-optimized development processes are cited as research. Used for examples in both stages and demonstrate and explain the principle of self-optimization several technological parameters, such as simplicity and efficiency improvement, are considered. We proposed a new approach and robotization with increased productivity to automate processes and we compared data obtained based on several research processes and results to improve product quality with the help of machine learning. In technological process control, machine intelligence is something created by programming computers with certain aspects of the human mind, such as learning, we can understand it as a program resulting from the sum of several ways of solving problems and setting priorities. The machine can solve a number of complex problems using these capabilities. Growth and fast the development of digital technologies and artificial intelligence technologies is becoming more and more difficult. Now, sophisticated manufacturing, the world of inventions and widespread adoption is undergoing a rapid transition. There are many robotics and it is more vital because it can now be related to the human brain through the connection between the machine and the brain, as artificial intelligence

Keyword

Artificial intelligence, robotic process automation, machine learning in a technological system,robotic machine mechanism

develops. This the world economy is facing serious challenges by increasing productivity in the manufacturing industry. This research we tried to study the current development of robotic communication methods of artificial intelligence. In many special applications, communication between robot team members or even humans becomes vital.

INTRODUCTION

Production processes face various problems in the conditions of working with modern technologies in technological processes. As a way to solve these difficulties the idea of self-optimization was put forward in this article. Although common the structure of production processes can be used and the technology system we will explain self-optimization, modification and improvement. Automated system management in technological processes must be introduced to overcome different specifications, e.g a robotic system used for packaging and vehicle assembly. This is a technological system the basic theory of design of production processes with including the function itself and the individual in the sense that attention was paid to the socio-technical basis and in this article, we presented theories about the role of the automated system in the management of technological processes. In addition, various problems, changes and extensive prototypes were demonstrated and based on technological automated system technologies we observed the processes in the development, packaging and assembly stage. These are technological processes constant control in production engineering also called a dramatic improvement in efficiency. The next step in control technology can be and technology called self-optimization. Information transfer to an automated system, taking into account technologies such as "Internet", is adaptation to changing environmental conditions and It becomes very necessary because the climate is constant. In addition, human and technological cooperation involves constantly changing management systems. Thus, self-optimization is seen as the gateway to the next stage and to increase efficiency, an automated system diagram is created in several technological processes. Artificial intelligence is the main mechanism of technology that enables automation in the management of technological processes and based on system software, and technology robots and computers for learning, evaluation and use you need to create a system that reflects your thinking skills. With the increasing complexity of technology, the need for artificial intelligence is expanding and that's it with the ability to solve difficult problems in a short time limited human resources and technological expertise will continue to lag behind. Artificial intelligence can be used to improve the visual acuity of the robot and an indicator of the accuracy of its image detection should be attached to the base of the system. It is important for them assembly because the robot can adapt welding or cutting and are the smallest micro level tolerance coefficients. Most of the robots In a system that is not programmed to be intelligent, a warning signal is sent when a technological system error occurs. Recently, many industrial robots can only be configured to perform a continuous sequence process and as we mentioned above, actions that do not require artificial intelligence augmentation technology should be performed. Artificial intelligence equips

and transforms technological skills. Modern in addition to learning and implementing new techniques and methods, we will learn several ways to improve the technological management system. Identification with machine intelligence is a huge success with big data sets and advances. The GPU contributed to the growth of the technology management system based on artificial data. The object and its surroundings will be included in the artificial intelligence system. The area is defined by an organization, including a person or robot using such detectors and actuators are placed in the system diagram. It uses a technique called search and template matching, which requires the machine's technology index and examine and resolve the basis of the received process if the specified requirements are met, these problems are considered. Robotics is a subject of integration between disciplines, covering many fields from mechatronics to management theories and software engineering, with new extensions we have obtained information through materials science, biotechnology or scientific methods. The interaction between artificial intelligence and robotics is very tangible. It deals with issues such as:

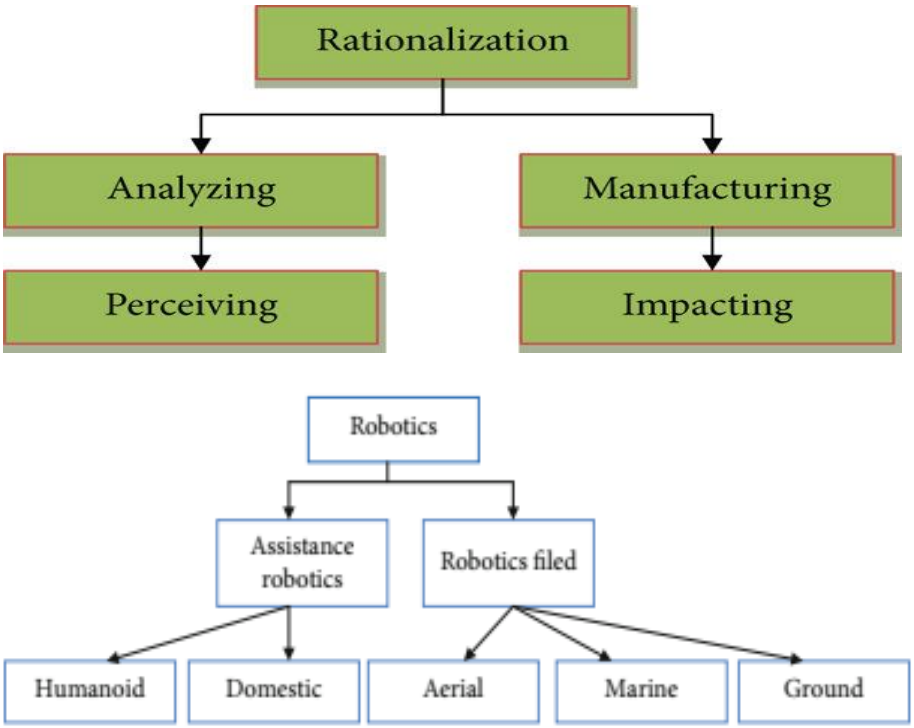
In technological activities, the process of making changes, organization, actions, monitoring and rationalization of goals is observed.

Improper mapping of settings for viewing, analysis, and understanding to the technological system schema replaces these technological processes and creates an error signal in the system.

A software-based system to interact with customers and other robots.

a special needs model by the specified methods robotics has always been an effective foundation for artificial intelligence technologies that are often mentioned in literary works, especially described in the steps mentioned above. In the early days of creating artificial intelligence, innovation initiatives abounded will be attached to the robot platform, which has taken over the research program, based on the automation of technological processes. This the two fields, however, have developed in different ways in the following years, and robots are being developed largely outside of AI tools.

Ideally, cooperation between the two would be restored. This rebirth is largely due to the emergence of mature technologies in robotics and artificial intelligence. Automated system low-cost robotic systems with high protection and actuation capabilities mean more popular times and deeper understanding opportunities. The problems of the smart machines we want based on scientific research we have mentioned the processes of helping with. Manufacturers can envisage the best together with the help of modern mechanization and mobile robots and two created the need to develop a production system. Mobile robots can be easily controlled for specific actions, transport and machinery, assembly, or quality costs in various manufacturing plants with weapons handle and batteries were formed for implementation. These actions are technologically complex enough for mobile robots to take over. Furthermore, the use of mobile robots means that power consumption or detailed design is relatively reduced and traditional industries will eventually be equipped with robots. These advantages allow the deployment of a robotic system and is established on the basis of a control system in convertible production processes.



Picture 1. A standardized diagram of artificial intelligence / robotics

Conclusion

In this article, the general principle of self-optimization in the technological system management process from the point of view of its relation to the production processes itself configuration and human inclusion in the socio-technical environment were studied. Besides, various problems, changes and comprehensive prototypes were developed, packaged and presented assembly phase processes are cited as examples. Technology is growing rapidly previously unimaginable indicators and results are being achieved. Moving from a coded life to an uncoded life life means a new journey. A chemical object's journey from the laboratory was much easier, precise, effective and feasible to market and faster, thus saving and keeping the energy being consumed within the limits of more technology to improve flow an autonomous, realistically moving automated car mechanism was studied. In robot arm planning and interactions, telecommunications and autonomous vehicle technologies, the issue of micro-optimization is considered. Innovations in this study are simultaneous management and soft working hours and limited mobile robot capabilities and stages of transition from laboratory configuration to high available technologies are outlined. In addition, robotic arm techniques, the skills and methods of the human using the robotic system serves as a foundation for cloud-based development. Otelbayev Azizbek, a student of the Nukus Mining Institute under the Navoi State University of Mining and Technologies, is currently conducting scientific research on the optimization and automation of technological processes in mining processes, and the use of robotization processes in mining enterprises. Azizbek's interest in the technological activities of mining enterprises is very high. Otelbayev Azizbek's many articles about

processes in mining enterprises were published in international magazines. Currently, Azizbek is promoting the use of the development stages of technologies in mining enterprises. which can further increase performance indicators. I wish Otelbayev Azizbek, a student of the Nukus Mining Institute, good luck in his work and scientific research. Azizbek's articles on technologies and technological processes in mining enterprises were published in international magazines. He is very interested in technological processes, currently studying computer systems management, applications used in mining enterprises. Azizbek is a 4th year student and has been following the processes in mining enterprises for a long time. He is interested in mining and loading processes, flotation and beneficiation processes, and the structure of metal melting furnaces in mining enterprises.

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