CREATION AND DEVELOPMENT OF A MODEL OF TRAFFIC CONTROL THROUGH ARTIFICIAL INTELLIGENCE IN OPTICAL TRANSPORT NETWORKS

Kadirova Laylo Imomaliyevna

TUIT

ANNOTATION

This article is a selection of suitable optical network elements. Recently, devices such as optical multiplexers and demultiplexers, cross-connectors, optical regenerators (3R regenerators) and amplifiers, which are important elements of the optical network, have been extensively researched. These devices are being developed by specialized companies and firms. Despite the variety of devices, the selection of devices that are suitable for the characteristics of the optical network under construction, which are cost-effective and can be easily changed in the future, and develop, is considered one of the important tasks.

Key words: optic network, transport, structures, generator, signal

Choosing the optimal structure of the network. Optical transport network architecture XEAI of G.872 recommendation. Each state, on the other hand, chooses a network structure when building a network, taking into account the geographical position, administrative divisions, Network subscriber density and other features of the state.

Research optical network interfaces. In optical transport networks, streams of IP, ATM, PDH, SDH and other technologies can be placed (encapsulated) directly. This requires a universal (open) interface that encapsulates all kinds of technologies. In recent years, considerable work has also been carried out in this direction. In particular, HEAI's G.709 and G.Recommendations 979 were issued, but at the same time, the work to be done in this direction is only.

Ensuring the information security of the optical network. The issue of Information Security is an urgent, important issue not only in optical networks, but also in telecommunications in general. Various methods of information security are currently being proposed and researched. The most convenient, optimal of these

methods is the selection or the proposal and justification of new methods is within the scope of this direction. Work that must be carried out in optical transport networks, perfected by bisyor.

In turn, the introduction of artificial intelligence into science requires an increase in the number of qualified personnel. It is precisely specialists who are masters of their profession who will be the main factor in the penetration of artificial intelligence into all aspects. Currently, in this direction in our country, the specialty “digital technologies and artificial intelligence” has been included in the nomenclature of scientific and scientific and pedagogical specialties of highly qualified personnel, and its passport has been created. The Tashkent University of Information Technology named after Muhammad al-Khwarazmi and the Research Institute for the development of digital technologies and artificial intelligence opened the Institute of higher education in the “specialty of digital technology and artificial intelligence”.

In the field of artificial intelligence, a total of 28 target quotas were allocated to the base doctoral and trainee-research. From this, 14 admission quotas were allocated to the base doctoral and 14 to the trainee-research. Also, 10 young scientists, sorted by the direction of digital technologies and artificial intelligence, will be sent for short-term scientific internships to leading foreign scientific organizations in 2021-2022.

In the framework of scientific and Technical Research and support of innovative developments in the field of artificial intelligence, the total cost is 15.1 billion. there are 9 projects in progress, with a duration of 2021 – 2024.

In the framework of the annual international innovation ideas week “Innoweek.uz-2021”, the Ministry of innovation development will hold an international conference on “artificial intelligence – the basis of technological development” on November 24 of this year.

Artificial intelligence is entering our lives, but it is natural to ask the question of what it is. Therefore, we bring to your attention some information about artificial intelligence.

Artificial intelligence is neither a format nor a function

In short, artificial intelligence is a system or technology capable of imitating human behavior when performing certain tasks, gradually perfecting using the information obtained. Artificial intelligence in general is not a format or a function, but a process that includes data collection, analysis, etc.

Speaking about artificial intelligence, it is necessary to analyze its place in business and Information Technology. The slow penetration of artificial intelligence into these directions ensures that the number of AI tools increases.

"Artificial intelligence" means that most robots are attracted to different areas. But the term artificial intelligence does not mean that robots exchange places with a person. Its main goal is to expand the boundaries of human abilities and capabilities. Therefore, technologies like this are a valuable business resource.

Previously, the term" artificial intelligence " was applied to perform tasks that only people could perform, such as customer service or playing chess. An in-depth study of computer technology was also seen as artificial intelligence. But customer service is a subset of artificial intelligence technologies, such as in-depth study of various online games and comp technologies. True, artificial intelligence technologies help to increase efficiency by automating the tasks that people perform. But now its scope is expanding, now with artificial intelligence it is possible to determine the character of people, the abilities of students, the employee's vision of work.

REFERENCES

1.Varlamova L. et al. Fuzzy logic traffic management model //InterConf. – 2020.

2.Muazzam A. Image constrict by the wavelet shrink //International Journal of Recent Technology and Engineering. – 2019. – Т. 8. – №. 1 S4. – С. 862-864.

3.Артиков Т. У., Ибрагимов Р. С., Артиков М. Т. Развитие сейсмического процесса в очаговых зонах сильных землетрясений Узбекистана и долгосрочный прогноз сейсмической активизации //Геология и минеральные ресурсы (Ташкент). – 2009. – №. 1. – С. 23.

4.Зайнидинов Х. Н., Артикова М. А., Фазлиддинович Д. Сплайн-метод анализа и обработки сейсмических сигналов //Автоматика и программная инженерия. – 2017. – №. 1 (19). – С. 54-57.