MUHAMMAD AL-XORAZMIY NOMIDAGI
TOSHKENT AXBOROT TEXNOLOGIYALARI UNIVERSITETI
NUKUS FILIALI

«XALQ XO'JALIGI SOHASIDA ILG'OR TEXNOLOGIYALAR TADBIQI MUAMMOLARI»

MAVZUSIDAGI HUDUDIY ILMIY-TEXNIK KONFERENSIYASI

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27-dekabr 2023 yil

Konferensiya IL-392103072-"Chorvachilik komplekslarini elektron boshqarishning mobil ilovasini yaratish" innovatsion loyiha doirasida olib borilgan ilmiy-amaliy tadqiqotlar natijalariga bagishlangan

Nukus sh. A.Dosnazarov k. 74 uy (61) 222-49-10 www.uzplf.uz www.tatunf.uz

COMPUTER LINGUISTICS IN DEVELOPMENT STAGES

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Annotation. Today, when computer linguistics has developed, we need to understand the essence of computer language. The computer itself works in 2 processes: 1 are technical and linguistic processes.

Keywords: computer linguistics, Classical linguistics, transformational, programming language, result, BASIC, PASCAL.

Introduction. Today, we cannot imagine our life without a computer. We must first know how it works and use it wisely. Everyone who uses a computer in their daily life should know what language the computer understands. There are many programmers who studied computer linguistics. If we look at the history, we can see that many professors and scientists worked.

Main section

Developmental stages of computer linguistics Let's start with the history of its origin. Computer linguistics appeared in the USA in 1960. The computer collides with language on all fronts. But this language is incomprehensible to formalized people.

In this sense, the principle of operation of the computer can be explained as follows, depending on this, the computer works on the basis of 2 supplies.

1. Technical support
2. Linguistic support

Computer science and linguistics work together because these resources complement each other. As a result of this, the science of computer linguistics emerges. The emergence of the science takes place under objective conditions.

American linguist was the person who motivated the emergence of computer linguistics. He introduces the idea of transformational grammar in his research entitled "Syntactic Structures". Accordingly, the meaning of a certain sentence can be changed and different sentences can be seen.

Such sentences are called transformed sentences. In the process of working with text on a computer, the idea of transformation plays a very important role. Computer linguistics relies on the traditions of classical linguistics. It enriches it practically.

In some cases, it denies classical linguistics. Polysemy negates homonymous words. Classical linguistics works on the basis of the laws of natural language. It obeys the laws of computer linguistics and artificial language.

Artificial language programming language BASIC, PASCAL, C++ is a language created by linguists and programmers to be understandable for computer language.

In 1897, an artificial language was created, not for computers, but for the unification of the whole world and peoples.

The concept of artificial language also exists in the science of linguistics, and it is understood as a language created by people with the aim of making the nations of the world speak a single language. In 1897, the doctor Zamengov created the Esperanto language.

Esperanto is also an artificial language, learned by scientists from all over the world and used to speak in this language during conferences. The latest studies in the field of computer linguistics are as follows: 1. The idea of creating artificial intelligence. 2. Research on hypertext. 3. Research on information search. 4. Thesauri.

The idea of artificial intelligence is related to the development of computer technology, which appeared in the 70s of the 20th century. In this case, the artificial intelligence will have to respond to the following requirements. It will be able to communicate with a person.

In general, there are many networks of departments of computer linguistics, if we look at them, the science of computer linguistics is aimed at solving the problems of the era of globalization. It is a field that ensures the perfect learning of both technology and foreign languages by young people. The main goal of computer linguistics is to develop computer programs for solving linguistic problems and to create a data base for these programs. The object of study of computer linguistics is broad in its scope of analysis. Computer linguistics is inextricably linked with the theory and practice of linguistics, cognitive psychology, mathematics, informatics and philosophy.

Computer linguistics also covers issues related to the mentioned fields. Studying computer linguistics helps to understand the unique system of language, its value in the form of symbols, signs, models, social functions, introduction to new information technologies, theoretical issues of linguistics, cognitive psychology, logic, philosophy, mathematics. In the field of computer linguistics, monographs and textbooks have been created and scientific journals published abroad in English, Russian, German, French, Spanish.

Research on computer linguistics in Uzbek linguistics has been created only in recent years. Now the role of theoretical and practical research is very important in the development of computer linguistics as a science.

Automated information technologies and computers are of great importance in our society today. The computer is entering all areas of society day by day.

This is the reason for the emergence of new directions. In particular, as a result of the introduction of computer technologies into linguistics, the science of computer linguistics was formed.

computer linguistics deals with the implementation of algorithms and natural language communication between humans and EHM through computers. Man has invented electronic devices that make arithmetic calculations easier. It will soon become clear that these machines have the ability to solve a number of problems related to human knowledge.

Factual materials were collected, computer programs were created, and artificial languages were created for processing knowledge. These processes formed the basis for the formation of a new field called "artificial intelligence". In our time, many theoretical studies on artificial intelligence have been put into practice.

Performs accurate mechanical operations and image interpretation. If we look back in history, in 1954, machine translation at Georgetown University in the USA

the first experiment in the world was conducted and the process of translating about 60 Russian sentences consisting of 250 words into English was carried out using the IBM-701 translation device.

By 1955, the process of translating English sentences into Russian was carried out with the help of the BRSM machine device (based on the project of I.K. Belskaya, L.N. Korolev, S.N. Razumovsky). England, France, and Austria have also become interested in the problems of machine translation.

In linguistics, the issues of typological classification of a certain language, analysis and synthesis of language materials, processing of natural language, transfer to machine language are gaining urgent importance. He held special scientific conferences of linguists on the issue of automating linguistic research. For example, in 1962, the IX Congress of World Linguists was held in Cambridge. At this conference, a special place was devoted to discussing the problems of structural linguistics (ST) and mathematical linguistics ML.

In 1967, the X Congress of world linguists was held in Bucharest, where the problems of mathematical linguistics and machine translation were specially discussed. A special algorithmic language ALGOL was introduced at the International Congress held in Paris in 1960. This algorithmic language has been used for inputting texts to EHM and programming them until now.

The researches carried out in the field of machine translation of computer linguistics became the basis for the creation of programs that translate from Russian into other languages, which are available on all computers today. In particular, the scientific strategy of word-for-word translation developed by L.L. Nelyubin and his students that period corresponded to the requirements and advanced experience of world engineering linguistics. L.L. Nelyubin tried to create a morphological-syntactic algorithm-frame that provides the possibility of complete translation together with an automatic dictionary of words and phrases; based on the created translation programs, the teacher developed the rules for creating a linguistic

automaton (obuchayushchiy lingvisticheskiy automaton). This project allows teachers to translate official documents in English into Russian.

We should also provide information about the grammatical features of the linguistic processor, because it would be useful for us, users to know which language the computer processor we use in our daily life understands. Computer analysis and the algorithm for translating English sentences into Uzbek. if we give information about the algorithm of the program, the principle of operation of the program.

Applying mass computer models for translating English texts into Uzbek and, conversely, Uzbek texts into English, languages teaching with the help of a computer, evaluating knowledge, editing texts are the most urgent problems. English-Uzbek and Uzbek-English computer translation programs are of great importance. It is known that English and Uzbek languages are fundamentally different from each other according to their lexical-grammatical features. Therefore, from English to Uzbek and creating a computer translation from Uzbek to English presents its own challenges. Today, versions of automatic translation programs from English to Uzbek using the Russian language have been announced. In some programs, translation from English to Uzbek is carried out without an intermediary language. This process occurs on the basis of algorithms and formal models of syntactic analysis of sentences.

Computer translation algorithm from English to Uzbek

The algorithm is designed to solve the following tasks:

I.I. Analysis - in which an English sentence is syntactically analyzed within the framework of a simplified model.

1.1. This model covers only simple sentences.

1.2. Each part of the sentence consists of one word.

1.3. There are no determiners in sentences.

1.4. standard types of sentences are considered (objective sentence: possessive + participle + object + case, interrogative, negative and interrogative-negative sentences).

1.5. Participial sentences covering the following conjugation forms of the verb are considered:

Analysis of the principle of program operation with the help of a control example:

We received a letter from school.

I. Morphological analysis.

1) We - personal pronoun, first person plural, translated as "we";

2) Received-receive+ed, verb, translation: "to receive";

3) a-indefinite article;

4) letter - common noun, translation: "letter";

5) from-auxiliary translation: "from";

The proposed program is the basis for creating an English-Uzbek computer dictionary (cjmputer Dased Dictonary) and is the key to its effective and comprehensive use. and is intended for all people who face problems in translation every day.

Summary

In conclusion, computer users understand the processes in which the computer works, and understand its essence. This is where this language differs from human language. In general, if you understand the essence of something you are using, it means that you are in control of it.

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