ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ

ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ

ЖАС ҒАЛЫМДАР КЕҢЕСІ

Студенттер мен жас ғалымдардың «ҒЫЛЫМ ЖӘНЕ БІЛІМ - 2016» атты XI Халықаралық ғылыми конференциясының БАЯНДАМАЛАР ЖИНАҒЫ

СБОРНИК МАТЕРИАЛОВ XI Международной научной конференции студентов и молодых ученых «НАУКА И ОБРАЗОВАНИЕ - 2016»

PROCEEDINGS of the XI International Scientific Conference for students and young scholars «SCIENCE AND EDUCATION - 2016»

2016 жыл 14 сәуір
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Жинаққа студенттердің, магистранттардың, докоранттардың және жас ғалымдардың жаратылыстану-техникалық және гуманитарлық ғылымдардың өзекті мәселелері бойынша баяндамалары енгізілген.

The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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Scratch allows young people to understand the logic of programming and how to creatively build and collaborate.[3] Scratch lets students create "meaningful personal as well as educational projects" which allows students a "practical tool" to express themselves after learning to use the language.

Harvard University lecturer Dr. David J. Malan prefers using Scratch over commonly used introductory programming languages, such as Java or C, in his introductory computer science course. However, there is a limited benefit in a college level education. Malan switches his course's language to C after the first week.https://en.wikipedia.org/wiki/Scratch_(programming_language)#cite_note-12[4]

Artificial intelligencein education,namelythe use ofprogramslikeScratch, BYOB -is a cycleof activitiesin school oreducational institutions of additionaleducation,in which theprogrammingand design ofcombining, allowto formtechnical creativityskills, motivating studentsto the study ofthe exact sciencesand ensure theirearlyprofessionalorientation.

At present thiseducational programwithartificial intelligenceelementsare increasinglygaining momentumin the world.Given thegrowth in demand forIT-specialists, this approach to theeducational programis becoming increasingly popular-not onlyintroducehishigher educationin theschool,but also ordinaryteacher. Unfortunately, this educational programhas not yet beendeveloped inour country.

Literature

1. Russell & Norvig (2003) (who prefer the term "rational agent") and write "The whole-agent view is now widely accepted in the field" (Russell & Norvig 2003, p. 55).
2. Pamela McCorduck (2004, pp. 424).
3. Kids' Programming Tool Scratch Now Runs In The Browser, TechCrunch, May 2013.
4. Young, Jeffrey R. (July 20, 2007). *"Fun, Not Fear, Is at the Heart of Scratch, a New Programming Language"*. The Chronicle of Higher Education. *ISSN 0009-5982*. Retrieved 2015-05-09.

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ADVANCE OF THE HUMAN CONDITION VIA EXPERT SYSTEM

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As we know there is a wide range of different technological achievements that are very useful for human daily necessities. Particularly the process whichcontains a lot ofdevelopment of software is sharply increasing day by day so that people absolutely try to make an opportunity on every area of life.On this occasion the concept of the artificial intelligence was established in previous century in order to suggest actual solutions for special kinds of social problems.

Artificial intelligence is the branch of computer science concerned with making computers behave like humans. The term was coined in 1956 by John McCarthy at the Massachusetts Institute of Technology[1]. At first its primary concerns were centered on game playing, planning, and problem solving. In the environment of that era, it would have been very difficult to predict that three decades later the most important application areas of AI would be centered on knowledge engineering and, more particularly, on expert systems(also called intelligent systems).

Expert Systems make extensive use of specialized knowledge to solve at the level of an expert person who has expertise in a certain area. That is, the expert has special skills that are not known or available to most people and can solve problems more efficiently than many people [2].

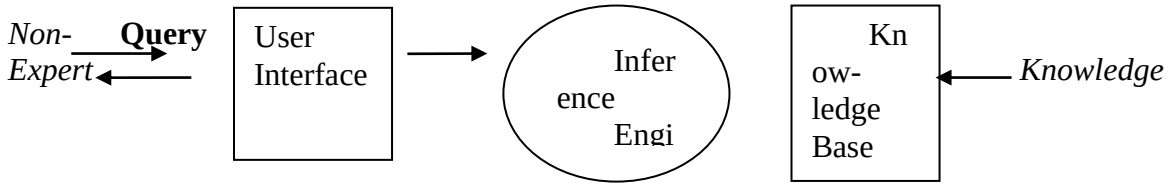

Figure 1 - Execution of expert systems

It is currently said that, being not only the computer program, but also the development of intricately machined components, expert systems are utilized in the following fields of social life:

Medical diagnosis

In an attempt to overcome limitations inherent in conventional computer-aided diagnosis, investigators have created programs that simulate expert human reasoning. Hopes that such a strategy would lead to clinically useful programs have not been fulfilled, but many of the problems impeding creation of effective artificial intelligence programs have been solved. Strategies have been developed to limit the number of hypotheses that a program must consider and to incorporate pathophysiologic reasoning. The latter innovation permits a program to analyze cases in which one disorder influences the presentation of another. Prototypes embodying such reasoning can explain their conclusions in medical terms that can be reviewed by the user. Despite these advances, further major research and developmental efforts will be necessary before expert performance by the computer becomes a reality [3].Take for instance EasyDiagnosis [4] that is developed by MatheMEDics, is designed to assist in the medical diagnosis of Chronic Fatigue. The program is based on the assumption that Chronic Fatigue is the principal complaint, and that there are no other dominant complaints or symptoms.

Strategy games (like **chess** against a computer)

The knowledge base would contain strategies and moves, the player's moves would be used as the query, and the output would be the computer's 'expert' moves. This kind has become more popular, for illustrating example, in May 1997, an IBM supercomputer known as Deep Blue beat then chess world champion Garry Kasparov, who had once bragged he would never lose to a machine.

Financial Decision Making

The financial services industry has been a vigorous user of expert system techniques. Advisory programs have been created to assist bankers in determining whether to make loans to businesses and individuals. Insurance companies have used expert systems to assess the risk presented by the customer and to determine a price for the insurance. A typical application in the financial markets is in foreign exchange trading. One of them is the system called FINEVA(FINancialEVAluation), a multicriteria knowledge-based support system for the assessment of corporate performance and viability[5].

Identification of items (such as plants / animals / rocks / etc).

The process of pattern discovery and data item identification run recursively with communication among each component. The recursion provides a way of "finding" and "correcting" problems(i.e. it allows for one component to feed back information to assist the other component). Using this approach we can detect and deal with problems such as missing data, variations in orthographic patterns and unrecognisable data items [6].

Diagnose car engine problems

The development of this Expert System for Car Maintenance and Troubleshooting [7] was based of the current most popular choice of knowledge engineers for building an expert system that is rule-based expert system. The popularity of this kind of system's development has grown up due to the large numbers of successful rule-based system built and also the abundance of rule-based expert system software that is available easily. Besides, rule-based expert system is a representation of the human beings natural reasoning and problem-solving paradigm.

Sample Applications of Expert Systems

Credit Analysis

Many companies use expert systems to assist with credit analysis. The benefits of using expert systems for credit analysis are speed and accuracy, both which far exceed human capacity.

American Express uses expert systems to process unusual requests. The system, called Authorizer's Assistant, can process requests much quicker than the customer service representatives manually, and has decreased the bad guess rate. The rate was originally 15 percent error, but now has decreased to 4 percent with the installation of the system.

Security Trading and Portfolio Analysis

Morgan Stanley and Rockwell International are just a few of the investment firms that use expert systems. With the rule base in effect, the system can easily evaluate rate of return and risk exposure. Composing a portfolio manually can be time consuming, but the expert system can do it very quickly and generate consistent results. Morgan Stanley announced an increase of $1 million profit after the installation its system[8]. Manufacturer's Hanover Trust Co. has its own strategic technology and research group called STAR. The company has implemented six knowledge-based systems and plans to implement three more in the near future. The company cites that six out of every eight deals generated by the system is successful. Insurance companies also use expert systems. A study shows that 12 out of 28 of the largest insurance companies in the U.S. have developed expert systems. New York University has designed the Actuary Consultant System (ACS) to assist actuaries with evaluating risk on life insurance policies and disabilities. Lockheed Corporation has developed the Medical Charge Evaluation and Control (MEDCHEC) to check medical claims submitted. Financial planning services have typically been very costly. Expert systems reduce the costs of these services making the planning process quicker, easier, and more consistent. Employers are now able to offer this service as a benefit to their employees much more easily than before. Financial plans can help individuals with insurance, retirement, investments, income taxes, estate planning, and cash and debt management. The plans have general rules and should be flexible enough to accommodate personalized options, risk attitudes and individual preferences.

Expert systems are not only help us, but acting as a smart human full knowledge and give us advice in many areas such as answers for decisions, processes and tasks that are repetitive and thee hold huge amounts of information. In addition to these, they absolutely minimize our employee training costs in a comparison with simple occasion to which intelligent systems alternative are. However, there are also disadvantages to expert systems like no common sense used in making decisions and lack of creative responses that human experts are capable of. Thus, all of specialists in this line of occupation share responsibility for improvements of expert systems so that perfect performances will be given in a future.

Literature

1.Электрондық ресурс: AI–artificial intelligence: http://www.webopedia.com/TERM/A/artificial_intelligence.html

2. GiarratanoJ., RileyG.: Expert Systems- principles and programming. 2002; 602:2-3

3. Peter S. Ph.D.; Ramesh S. P., Ph.D.; and William B. SCH., M.D.: Artificial Intelligence in Medical Diagnosis. Research article from ANNALS OF INTERNAL MEDICINE Vol.108; No.1, pages 80-87. January 1988

4. Электрондық ресурс:http://www.easydiagnosis.com

5. Nedovic L., Devedzic V.: Expert Systems in finance- a cross-section of the field (research paper). 2002, 26:1-2

6. Galindo F., Takizawa M., Traunmueller R.: Database and Expert Systems Applications. Dexa 2004, 971: 235

7. Bin Zayiadi M.F.: Expert System for Car Maintenance and Troubleshooting. 2005;

8. JM & Co/AJRA: The Basics of Expert (Knowledge Based) Systems. 1997.

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WAYS OF INVOLVING MOBILE APPLICATIONS AS A FUNCTIONAL TOOL IN SELF-EDUCATION