

Intellectual System for Voice Control of Computer

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The use of highly intelligent modern computer information technology in the field of human activity requires the creation of systems that could dramatically simplify the process of managing automated systems to make the process of using them more convenient and efficient. The need for voice control of electronic devices is absolutely natural. Most of all, it is motivated not so much by the desire to create more convenience for the user, but by the existence of specific areas of computerization in various industries, where voice commands are the most suitable or even the only possible solution for device management.

Creating complete voice interfaces that support the user-computer dialogue is a very promising, but extremely difficult direction for the development of modern computer information systems. The subject of the study is the process of creating a multi-purpose computer voice control system that provides a variety of command execution capabilities that allow you to control the computer's cursor to do voice input, control applications, browsers, and more.

The purpose of the study is to create a computer-based voice control system that recognizes the Ukrainian language and uses advanced modern speech recognition techniques using neural networks and application interfaces.

The urgency of the work lies in the innovativeness of the software solution, the wide range of social and application problems that it can solve, such as the lack of voice control systems that recognize the Ukrainian language, or the lack of natural language recognition systems on the market that allow full use of the computer people who are unable to use traditional computer controls (computer keyboard, pointing devices, etc.) due to illness or damage to the musculoskeletal system, nerves her system. The proposed approaches and architectural solutions can be used by developers to build integrated computer-programmable voice control systems.

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