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Text to gestures translation for inflected languages

The book describes methods and information technology to implement machine translation of inflected languages to the sign language (SL) of the deaf people. The development of computer technologies helps to solve the socially significant problems, which were previously problematic, like the inclusion of deaf in active social life. The main obstacle to solving this problem is difficulty in communication between deaf and hearing people. The aim of the investigation is to create new information technology for nonverbal communication of deaf. SL of deaf is a natural language that conveys information through movement of hands and fingers, facial expressions, position the body. Automatic attribution of SL to all forms of verbal language is not entirely true, the morphology of SL follows the principle of value to the form. The values of "plurality", "time", "accessories" in SL are transmitted in specific ways. The way of doing gestures changes depending on the importance of gesture. The problem of building automated translation of text to SL it can be represented as forming the pairs of mutually unambiguous structures in inflected language and SL that conveys the sense of information.

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