ABSTRACT

The structure and scope of work. Explanatory note of the thesis consists of five chapters, has got 12 figures, 18 tables, 1 appendix, 26 sources.

Diploma project is dedicated to the development of software application for maintenance of the processes to translate Ukrainian sign language into Ukrainian written language.

In the chapter describes the general terms of domain knowledge, activity process before and after the application and user interaction with the application.

In the chapter of informational support incoming and outgoing data for software application was defined, also a database model was developed that satisfied the objectives of the project.

Chapter of the mathematical support is devoted to the algorithm for hand contour detection and gestures recognition.

Chapter of the software support has got a components diagram and specification of the main classes.

Chapter of the software support contains a components diagram and the main classes specification.

In the chapter of technology the user's guide and the application's testing results.

GR, UKRAINIAN SIGN LANGUAGE, THE PROBLEM OF PATTERN RECOGNITION, SUPPORT VECTOR MACHINE, MACHINE LEARNING