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**COMPUTER BASED ARABIC SIGN LANGUAGE RECOGNIZER**

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**ABSTRACT**

This paper presents a computer- based model to be used for impaired people. The paper describes a research effort to make a computer that can recognize and translate(with the possible goal of translating) sentence level Arabic Sign Language(ASL) using natural language processing for analyze and understand the input.

The scope of this work is creating a user independent, lexicon system for translating and recognizing Arabic Sign Language (ASL).Therefore, the system should be extensible toward this goal. Another goal is real-time system, which allows easier experimentation, demonstrates the possibility of a commercial product in the future, and simplifies archiving of test data. When an input for word is signaled (or stream of words-sentence), the interpreter interprets such input and therefore find out the equivalent sign image(s) using lexicon (database and grammar rule).

The model is developed primarily for hearing impaired pupils and is designed and implemented for

windows environment.