Abstract

The objective of the research presented in this paper is to facilitate the communication between the deaf and non deaf people. To achieve this goal, computers should be able to visually recognize hand gestures from image input. An efficient and fast algorithm for gestures of manual Arabic letters for the sign language is proposed. The proposed system uses the concept of hand geometry for classifying letter shapes. Experiments revealed that satisfactory results are obtained via the proposed algorithm. The experiment results show that the gesture recognition rate of Arabic alphabet for different signs is 81.6%.
- American Sign Language University &quot; http://lifeprint.com/ &quot;


**Index Terms**

Computer Science

Pattern Recognition

**Keywords**

Sign language recognition image analysis hand gestures hand geometry.