The Sign2 Project – PHASE I INVESTIGATION AND IMPLEMENTATION

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The purpose of this research is to design, develop and implement a device or apparatus that captures American Sign Language and converts it into sound and/or text. This will enable people who cannot use sign language to communicate with deaf and hard of hearing people. We are developing image processing techniques that will allow up do distinguish basic movements and translate it into spoken or written language. In this first phase we have implemented a procedure for the translation of ASL fingerspelling. From the processed images, a default database of letters will be created for correlation with input, which will then deliver the correct interpretation to the user. The broader context of this work has been proposed to the National Science Foundation in their Human Language and Communication program. The aimed result is to lead to the production of a portable device that can translate American Sign Language into English text or sound, in real-time and efficient manner.