Problem Identified - According to this, there are approximately 72 million people using sign languages. While on one hand, hearing and vocally impaired communities are completely dependent on sign language for communication, on the other hand, the rest of the world does not understand sign language, creating a communication barrier between the two groups. It is also unlikely that people without such impairments will learn an additional language which is not seen as a necessity for them.

Proposed Solution - The gap between the rest of the world and the hearing and vocally impaired community can be reduced by developing **Automatic Sign Language Recognition (ASLR)**.What is meant by ASLR is that, there is a central machine which will accept signs as input, process it, interpret it and then output corresponding speech transcript.

Presently, Most of the work in Automatic sign recognition used static images of alphabets signs which doesn't have any real life significance because the signs in real life are far more complex and involves dynamic sign patterns. Hence, we are planning to make a Mobile App which will able to classify American sign languages(ASL) directly from the live camera feed. Our novelty lies in the fact that we are working on training a machine which will able to classify video frames of dynamic signs, additionally, no such fully fledged app is deployed till now which can address the issue of such high vocabulary of ASL. In that way we will leverage the power of Computer vision and Deep learning to tackle this complex social problem of communication. We named this Idea - **Winnovation** because this innovation will definitely win several hearts.

Work Done till now - The preprocessing part is completed and several techniques was validated along with research work on current state of the art methods.

Refrences

1. Survey paper for explaining current techniques on Sign language recognition for different languages

2. Benchmark Datasets which we are using for predicting American sign languages - MS-ASL and WL-ASL