# **ASL translator using Transfer Learning**

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AAI 521: Introduction to Computer Vision

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11/5/2022

## ASL translator using Transfer Learning

Machine learning is used in Computer Vision to detect objects and hand gestures. This project creates a model to identify ASL signs. The application uses transfer learning and a curated dataset with a large corpus of alphabet and number signs.

## Background

ASL is used by many American with disability. The goal of this project is to develop an application that will help translate ASL characters to text. This could be used in many situations where ASL is used and there is a audience that does not know how to interpret signs.

**Application Design**

Image Processing

* Using OpenCV
* Using MediaPipe
* Detect Hand Gestures
* Extract Hand Sign and Store in Image

Modes Training

* Use MobileNet and Perform Transfer learning
* Use Dataset with 2GB of data
* Predict ASL alphabet/number

## Discussion

* Effect of data size
* Using a different model for transfer learning besides MobileNet

## Conclusion

## References