

ASL (American Sign Language) letter recognition from images using ResNet model

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Abstract: Research on a communication support solution for the hearing impaired through the recognition of 24 ASL letters from static images. The author applies the ResNet50 model along with Transfer Learning techniques to optimize feature extraction performance. The system is deployed via a web application using Flask, enabling fast and accurate recognition of hand signs. The project contributes a useful educational and communication tool for the community, helping to remove language barriers for the disadvantaged.

Keywords: American Sign Language (ASL), Image Recognition, ResNet

References

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