ASL Detection Application using MobileNet

Model Details

Overview:
MobileNet for American Sign Language gesture recognition, trained on a dataset of 87,000 images across 29 classes

Version:
Name - tfaslv3
Date - 12/6/2024

References:
https://cloud.google.com/blog/products/ai-machine-learning/create-a-model-card-with-scikit-learn

Considerations

Intended Use:
This model is designed for American Sign Language (ASL) gesture recognition and is intended for use in mobile applications.

Limitations:

- Performance may vary in different lighting conditions or with complex backgrounds.
- The model's accuracy might be lower for less common ASL gestures or regional variations.

Ethical Considerations:

- Ensure user privacy when processing sign language input.
- Consider potential biases in the training data and their impact on model performance across different user groups.

Pred: S Conf: 64.45% — Pred: B Conf: 26.69% — Pred: C Conf: 70.77% — Pred: D Conf: 83.30% — Pred: E Conf: 53.51%

Loss Curve

Accuracy Curve

Confusion Matrix