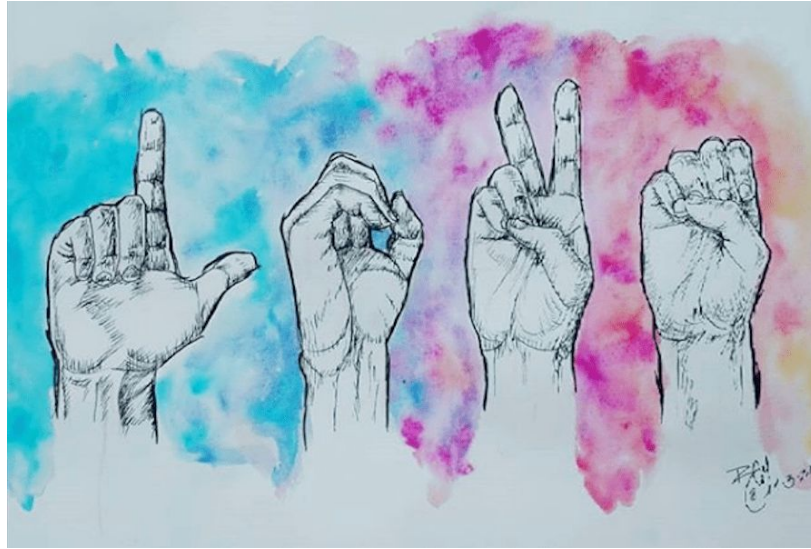


LENGUA DE SEÑAS COLOMBIANA



Diplomado en Inteligencia Artificial y Deep Learning - UNAL - 2021

***Uribe Sandoval Carmen Constanza
Marin Peña Dibier***



AGENDA

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Pruebas Modelo 1

TRANSFER LEARNING: Inception V3

RED NEURONAL 2

Pruebas Modelo 2

RED NEURONAL 3

Pruebas Modelo 3

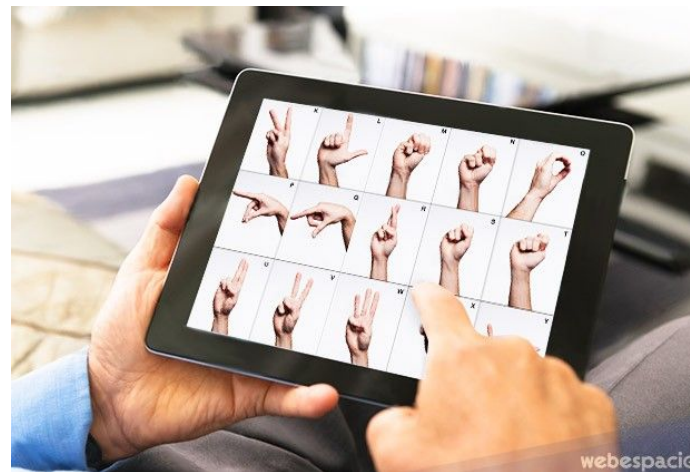
CONCLUSIONES

TRABAJO FUTURO

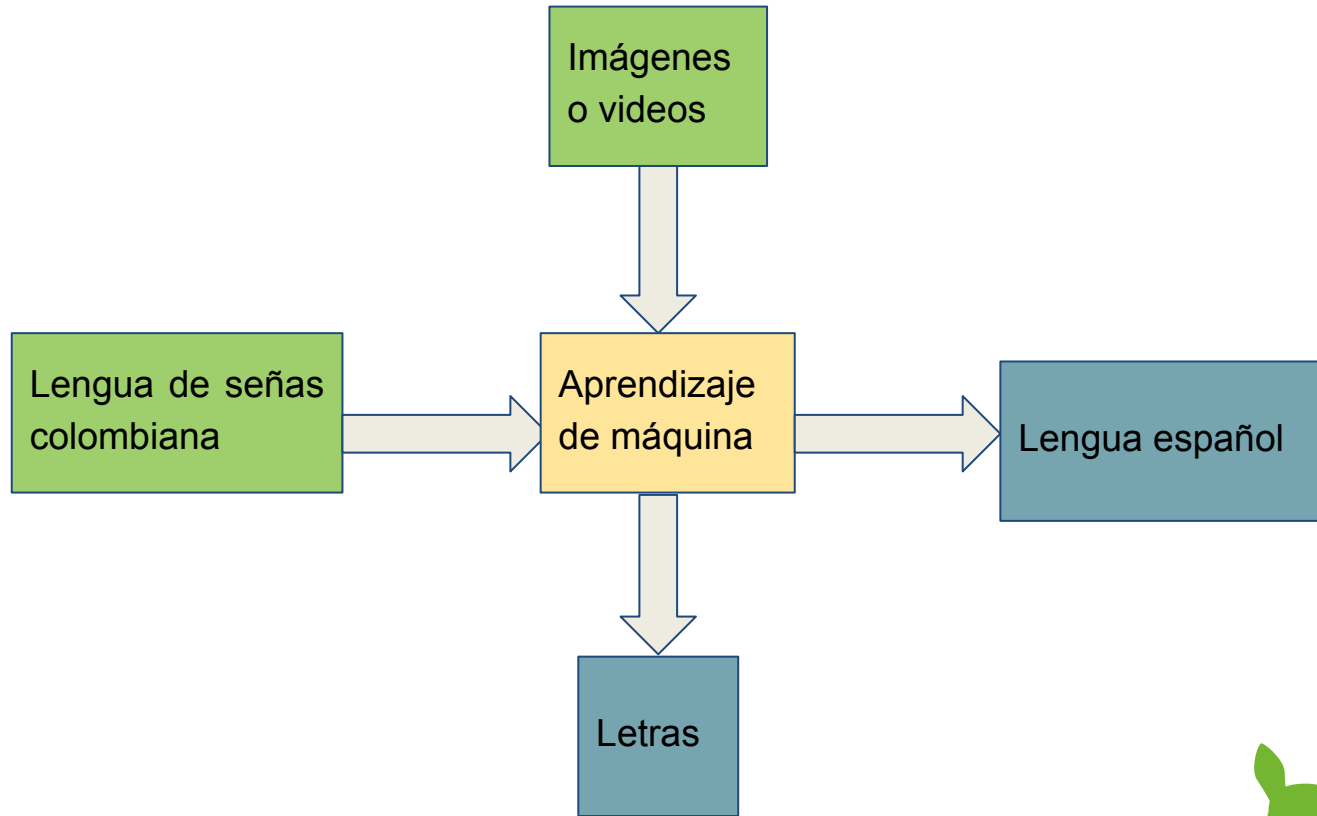
REFERENCIAS



INTRODUCCIÓN



Planteamiento del problema



DESARROLLO

Datos

```
!kaggle datasets download -d oscarstep/dataset-lsc-modelo
```

Data Explorer

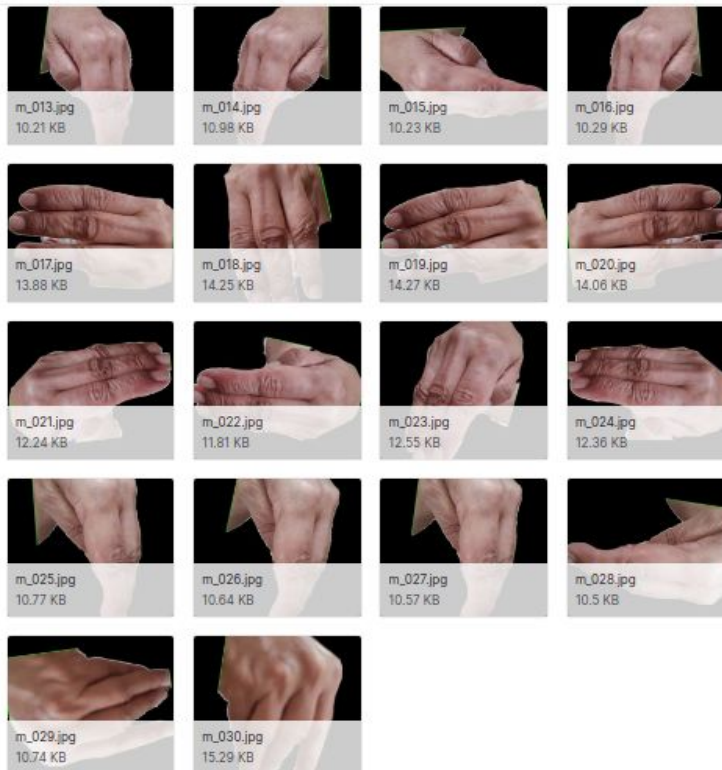
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- ▶ a
- ▶ b
- ▶ c
- ▶ d
- ▶ e
- ▶ f
- ▶ i
- ▶ k
- ▶ l
- ▶ m
- ▶ m_001.jpg
- ▶ m_002.jpg
- ▶ m_003.jpg
- ▶ m_004.jpg
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Summary

- ▶ 4199 files

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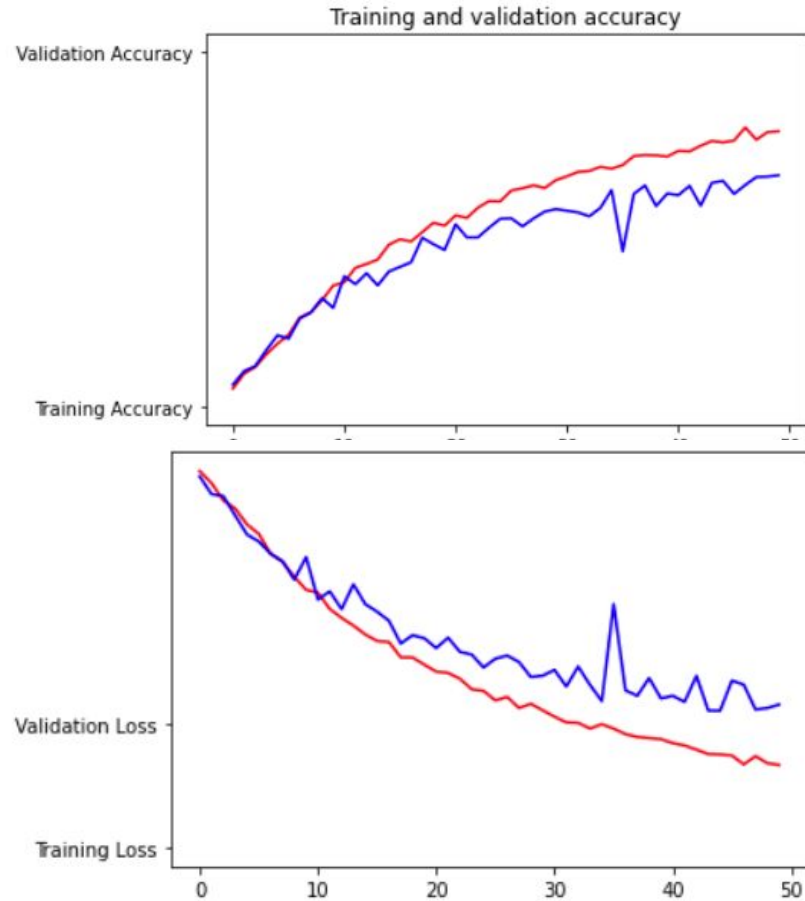


This preview shows 30 out of 200 items. [Load more](#)

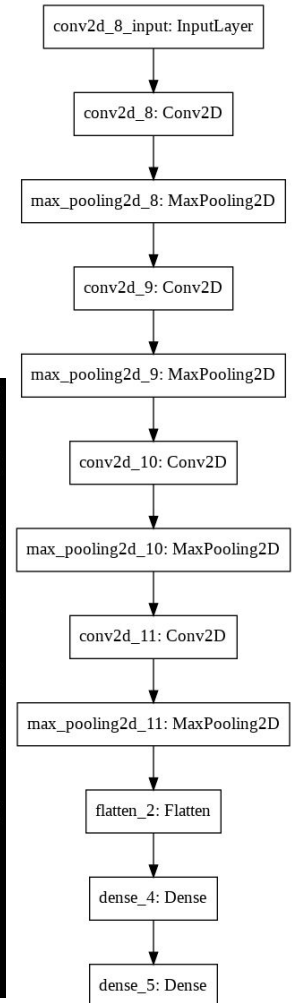
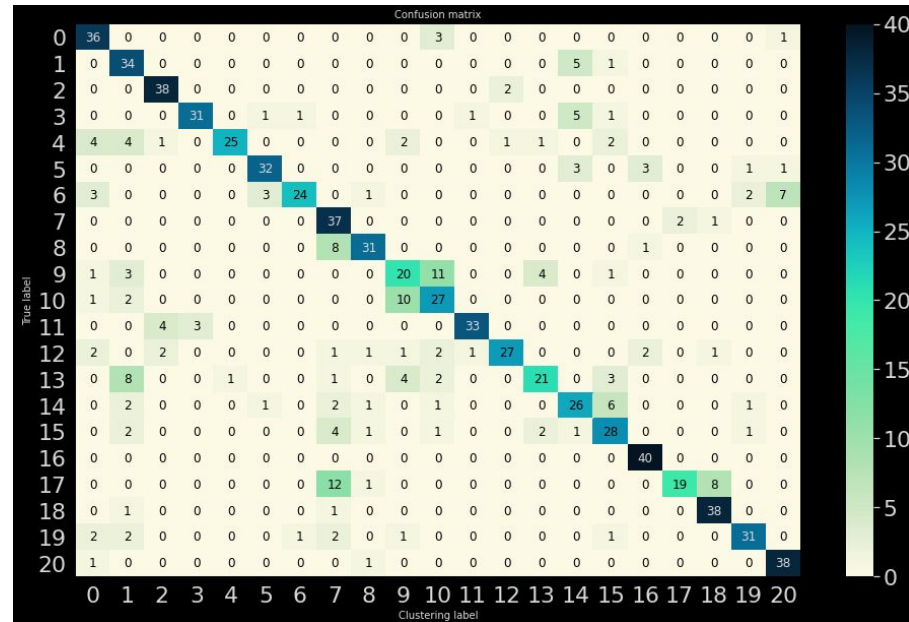
Training: 60%
Validation: 20%
Test: 20%



RED NEURONAL 1

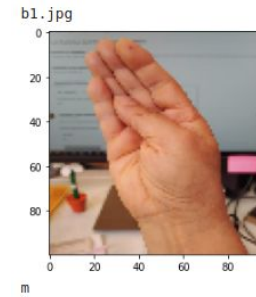
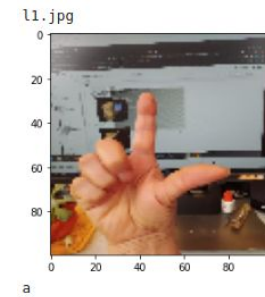
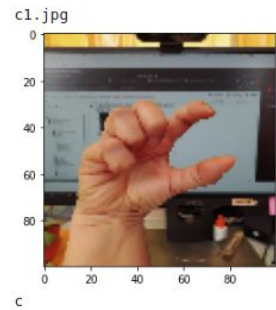
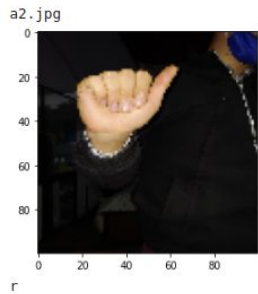
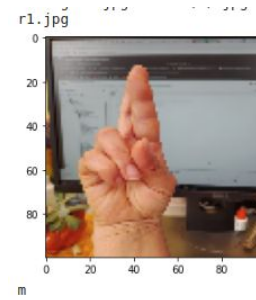
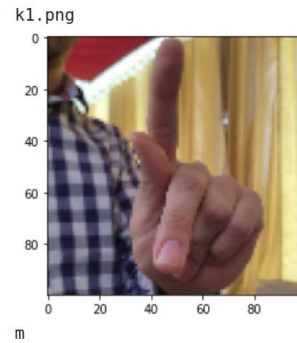
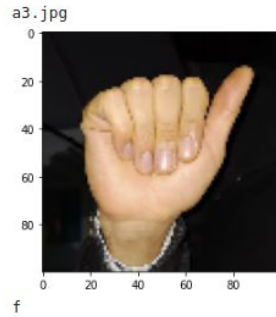
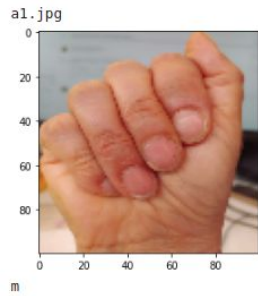


dataset-lsc-modelo



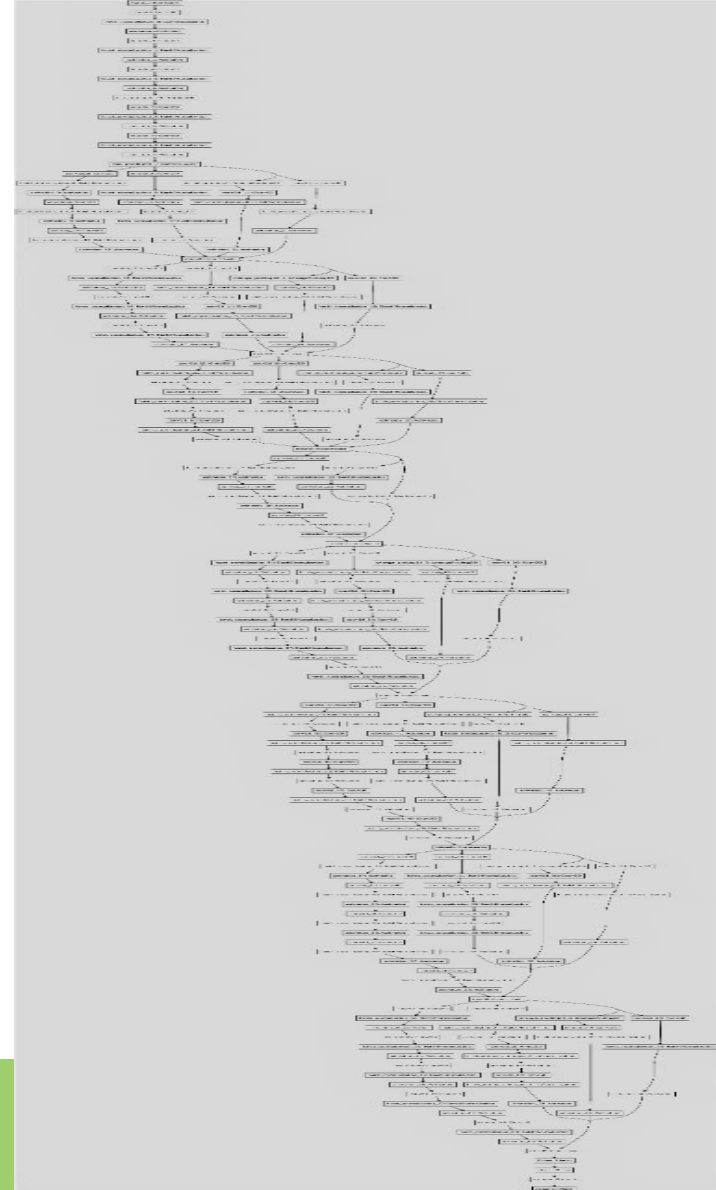
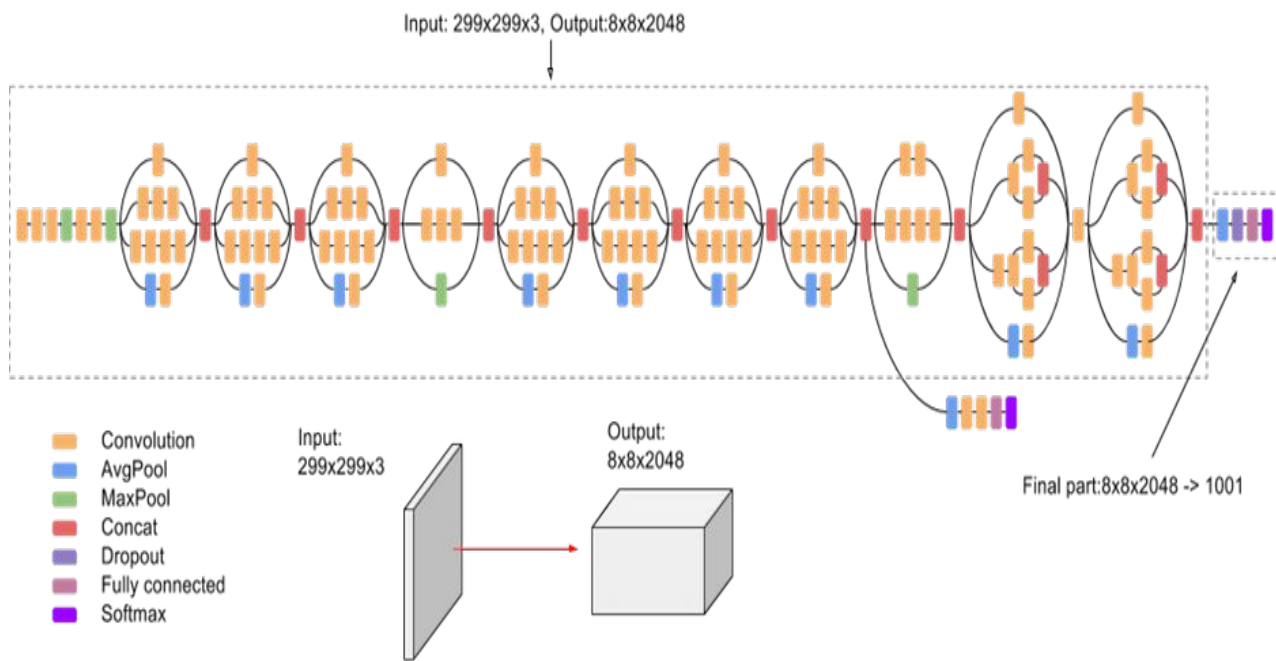
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Pruebas Modelo 1

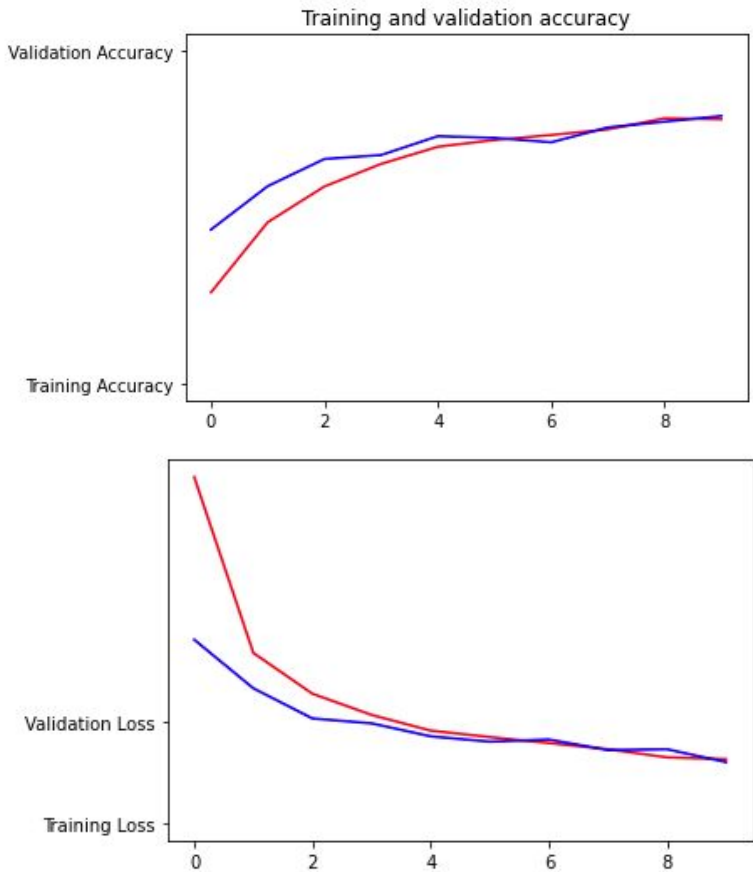


TRANSFER LEARNING: Inception V3

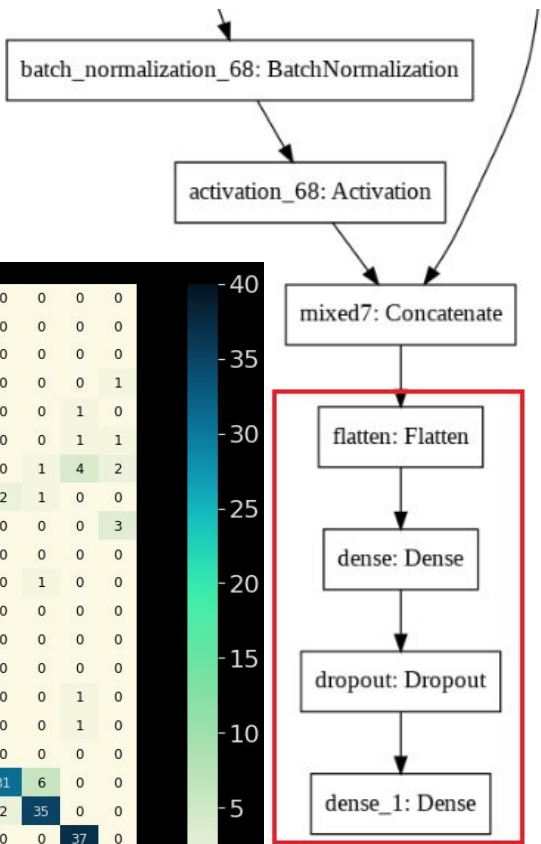
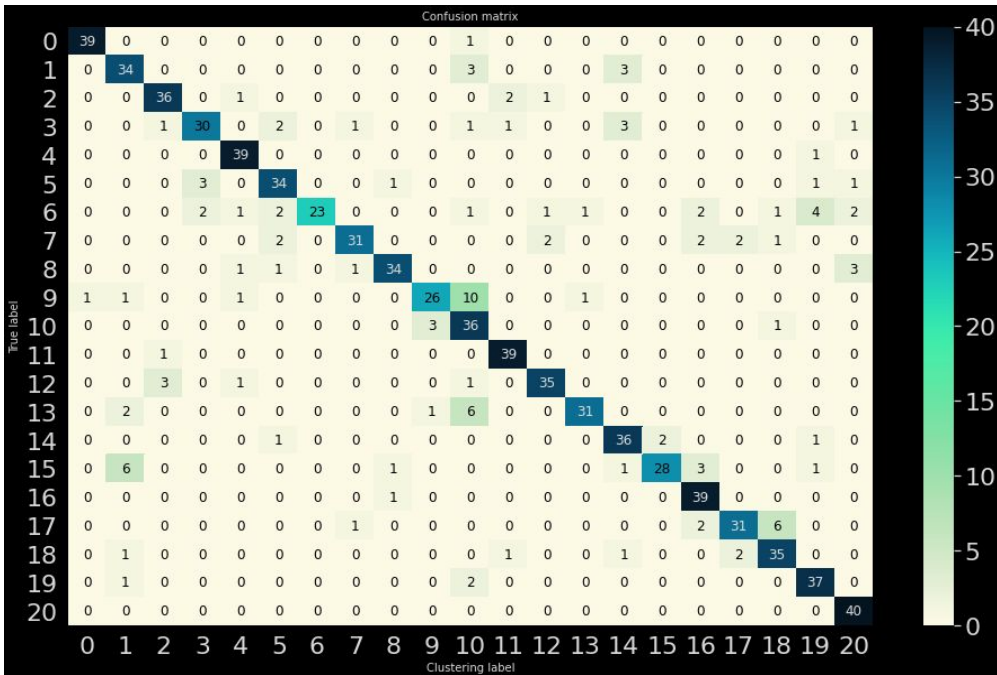
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!wget --no-check-certificate \
https://storage.googleapis.com/mledu-datasets/inception_v3_weights_tf_dim_ordering_tf_kernels_notop.h5 \
-O /tmp/inception_v3.h5
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RED NEURONAL 2



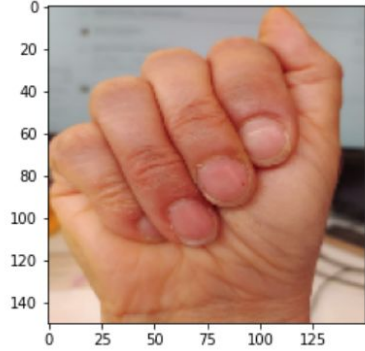
dataset-lsc-modelo



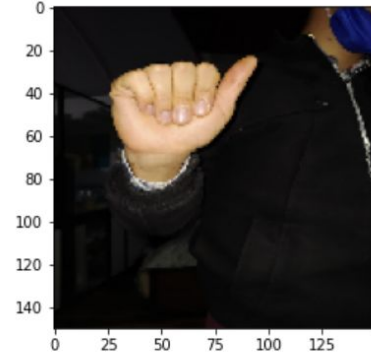
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Pruebas Modelo 2

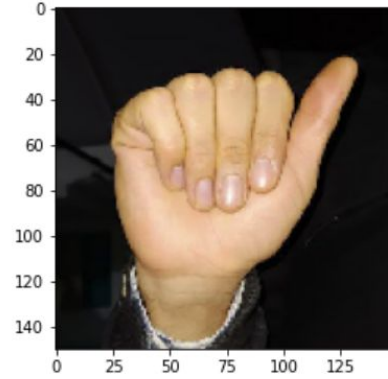
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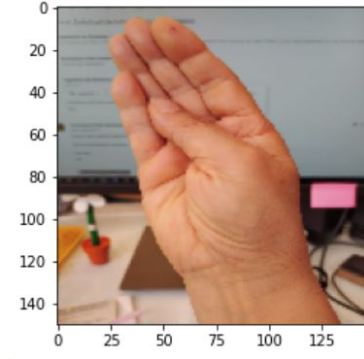
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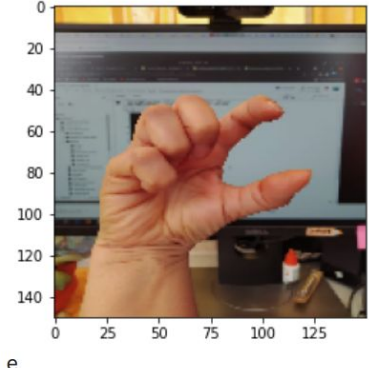
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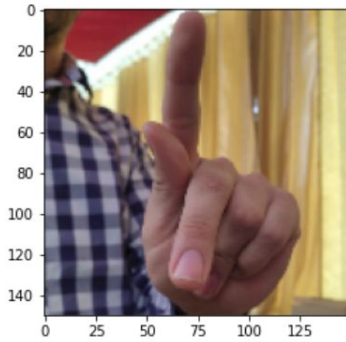
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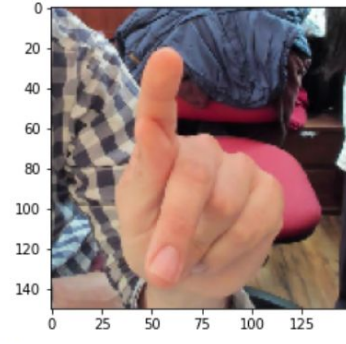
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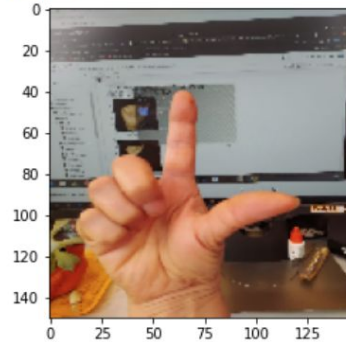
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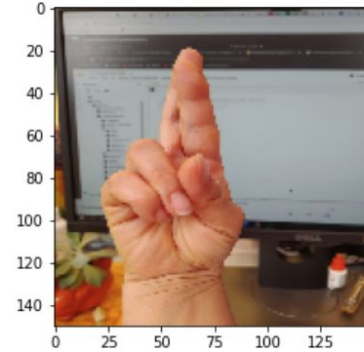
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l1.jpg

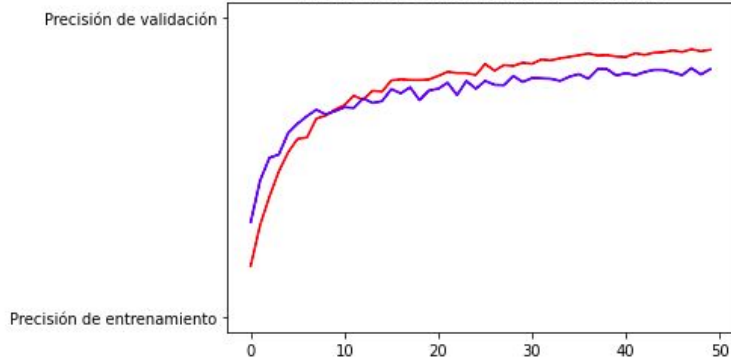


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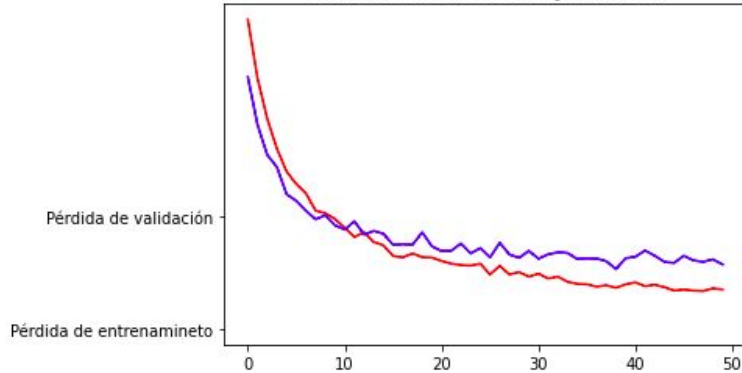


RED NEURONAL 3

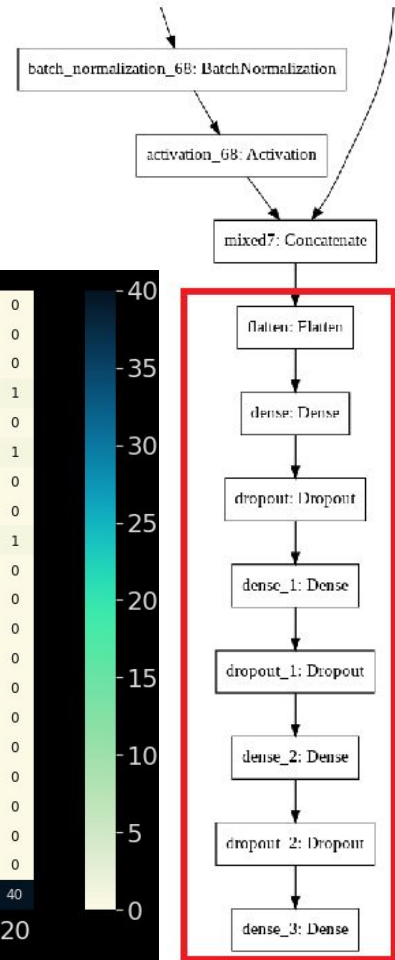
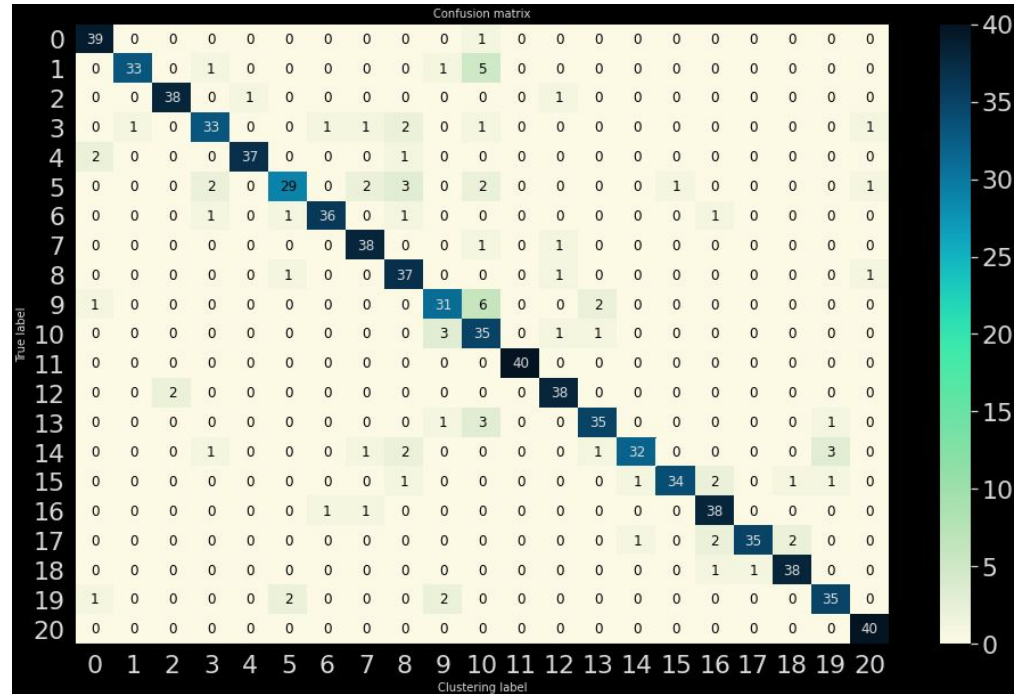
Precisión de entrenamiento y validación



Perdida de entrenamiento y validación



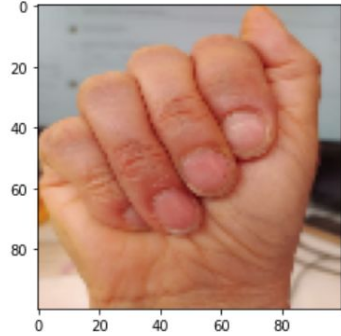
dataset-lsc-modelo



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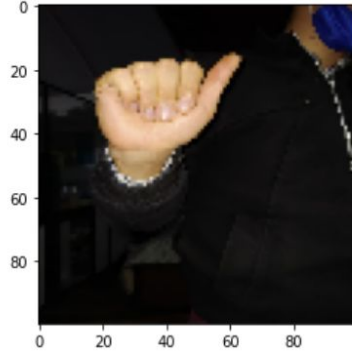
Pruebas Modelo 3

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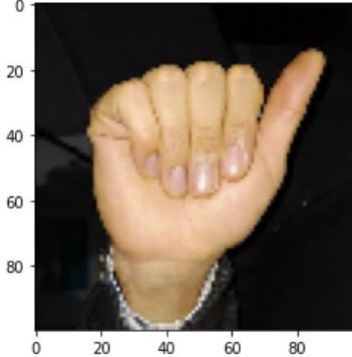
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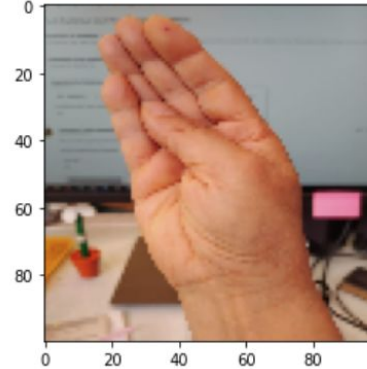
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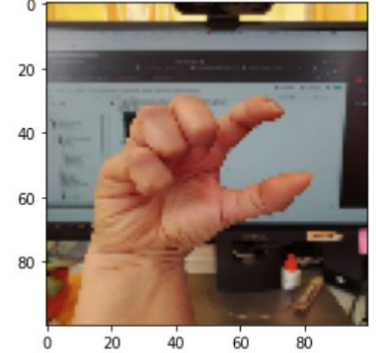
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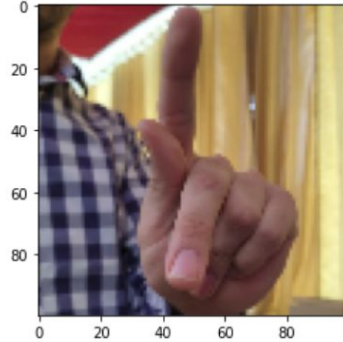
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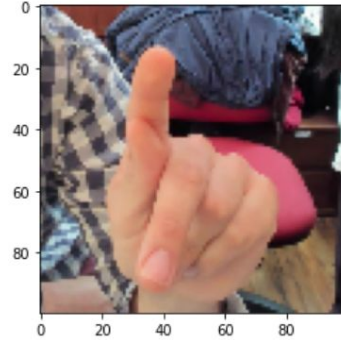
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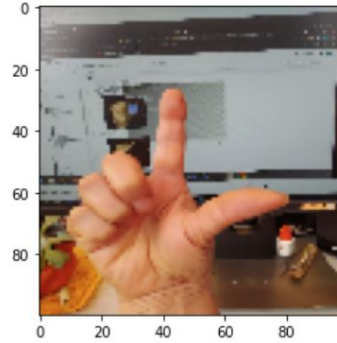
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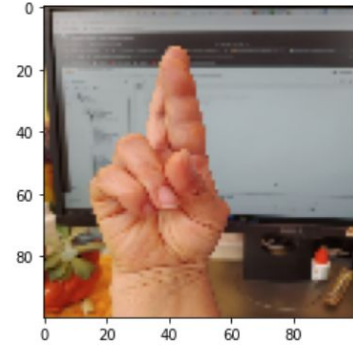
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l1.jpg



l

r1.jpg



e

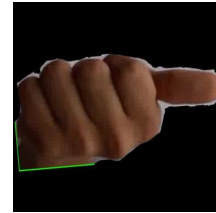
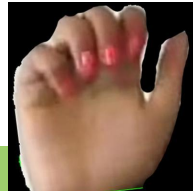
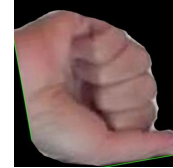
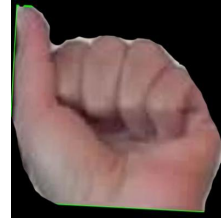
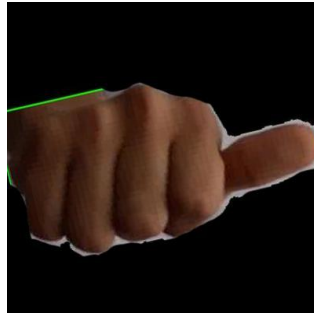
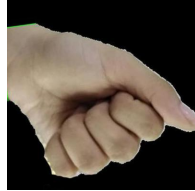
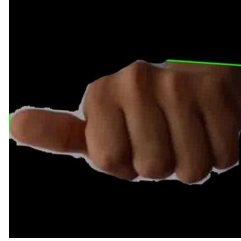
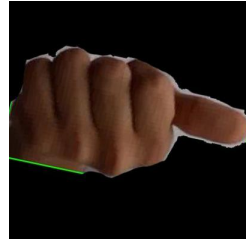


TABLA DE PRECISIONES

	Validación	Entrenamiento
Modelo 1	0.65	0.78
Modelo 2	0.85	0.94
Modelo 3	0.82	0.90



CONCLUSIONES



a_058.jpg



a_059.jpg



a_060.jpg



a_061.jpg



a_062.jpg



a_063.jpg



a_064.jpg



a_065.jpg



a_066.jpg



TRABAJO FUTURO

Entrenamiento con datos de mejor calidad

Vídeos con señas (frases cortas)

Vídeos con un mensaje completo (ej: una noticia)



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