

LIP READING FOR SILENT SPEECH RECOGNITION USING 3D CONVOLUTION

AUTOR:
JAVIER ALEJANDRO CAMACHO
MACHACA

TUTOR:
COEN JACOBUS ANTENS

ÍNDEX

PER QUÈ?

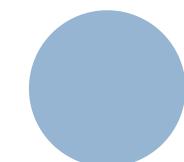
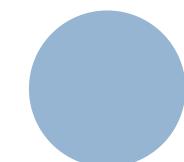
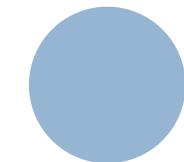
PROBLEMA

OBJECTIUS

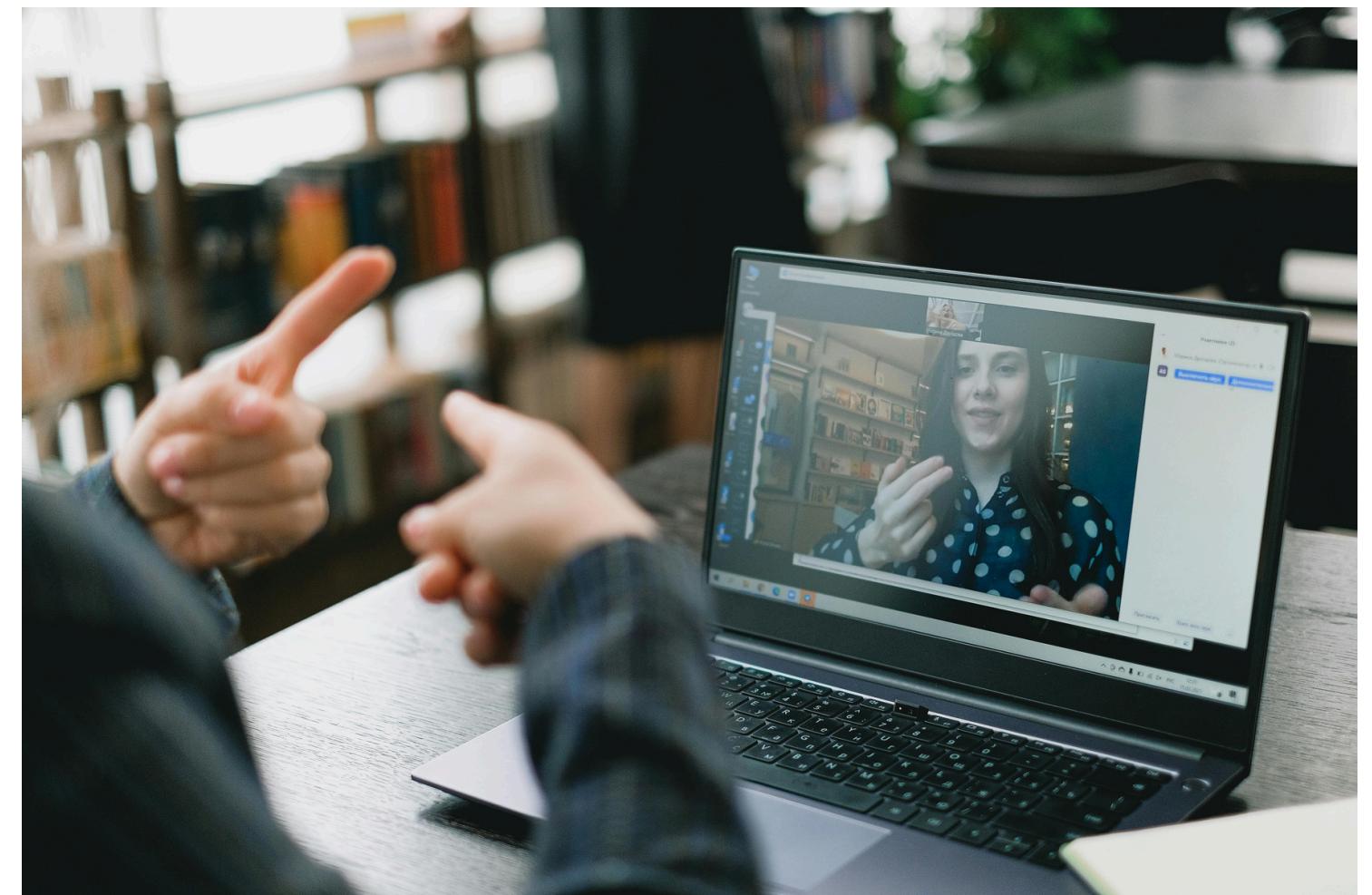
METODOLOGIA

RESULTATS

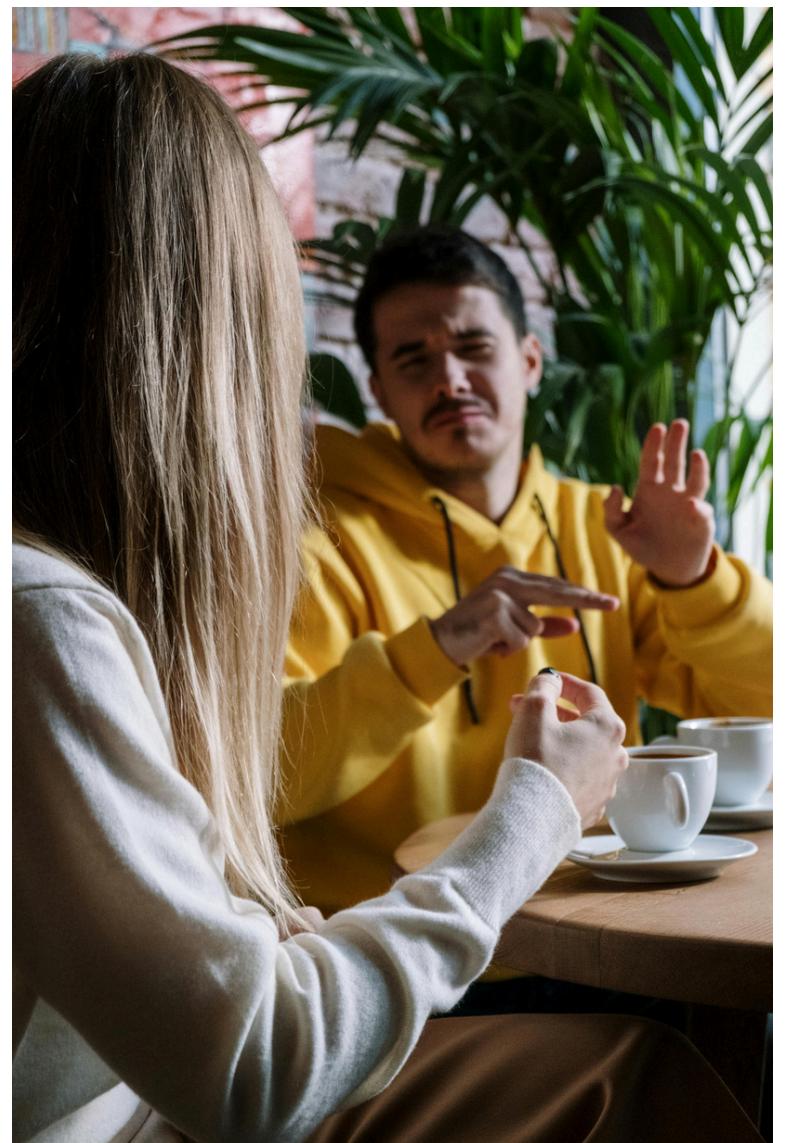
CONCLUSIÓ



PER QUÈ 'LIP READING'?



PROBLEMA



NO SENTEN L'IDIOMA
DE SIGNES

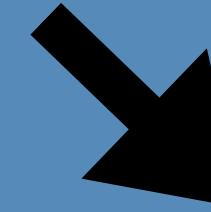
PÈRDUA D'AUDICIÓ



COMENTARIS DE
PARTITS

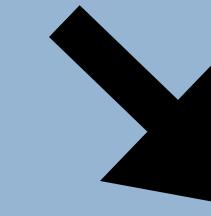
OBJECTIUS

CLASSIFICAR VOCALS



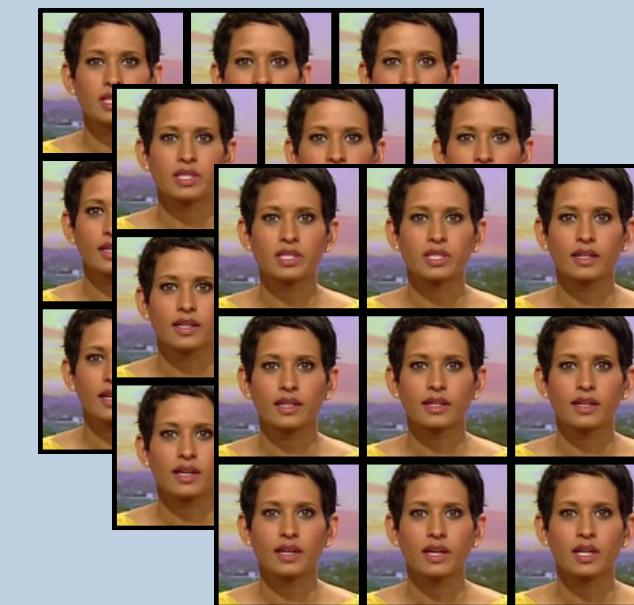
A

CLASSIFICAR PARAULES



ATTACK

PREDIR FRASES



ATTACK THE BASE

METODOLOGIA

KANBAN



EINA

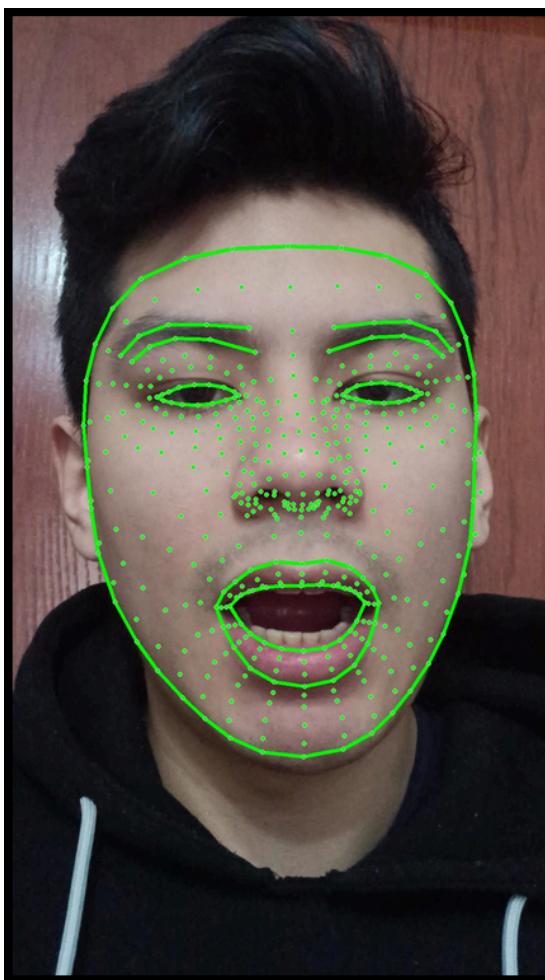
Jira Software

CRONOGRAMA



RESULTS

VOWEL RECOGNITION



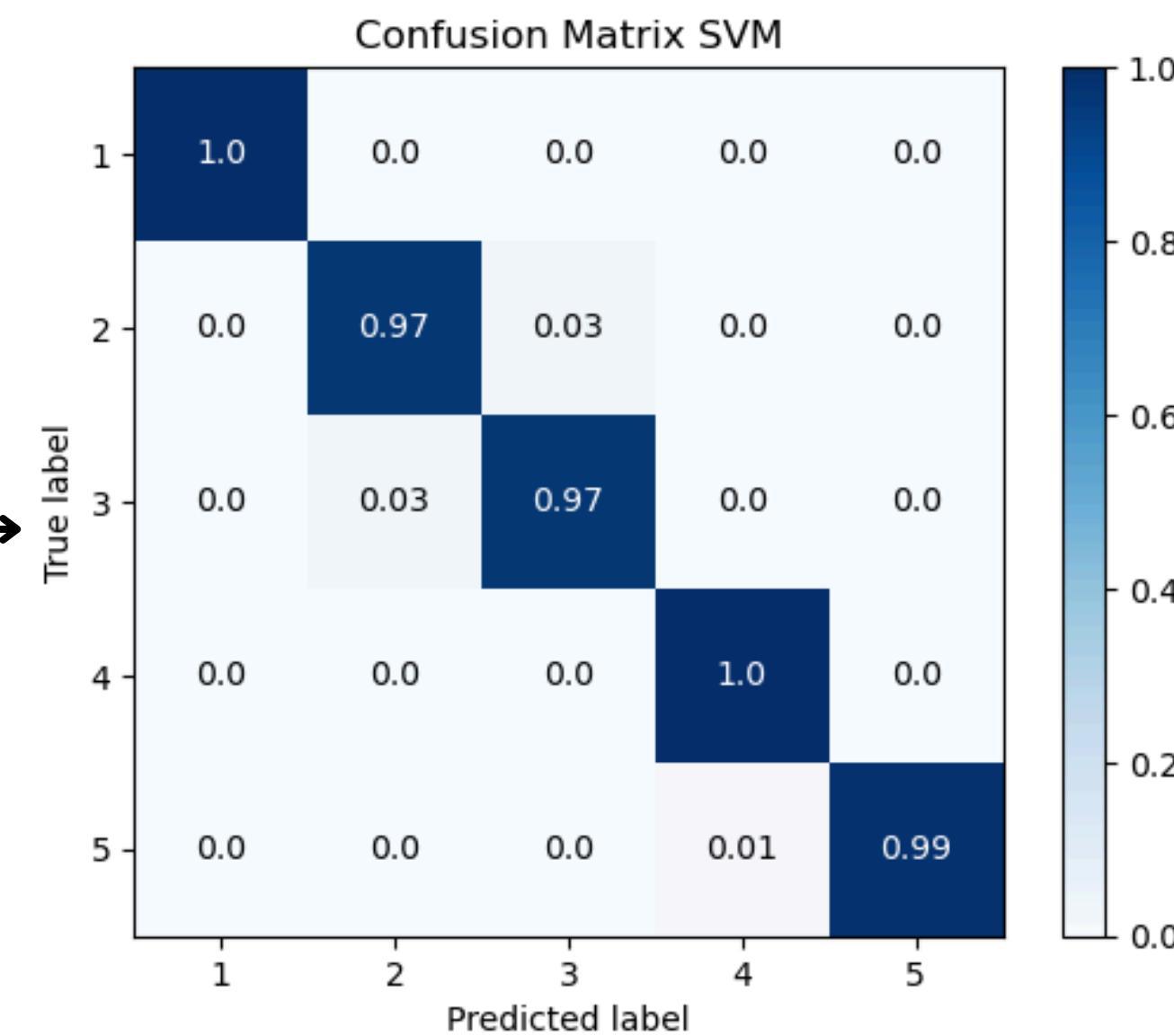
VOCAL - A

RESULTATS

VOWEL RECOGNITION

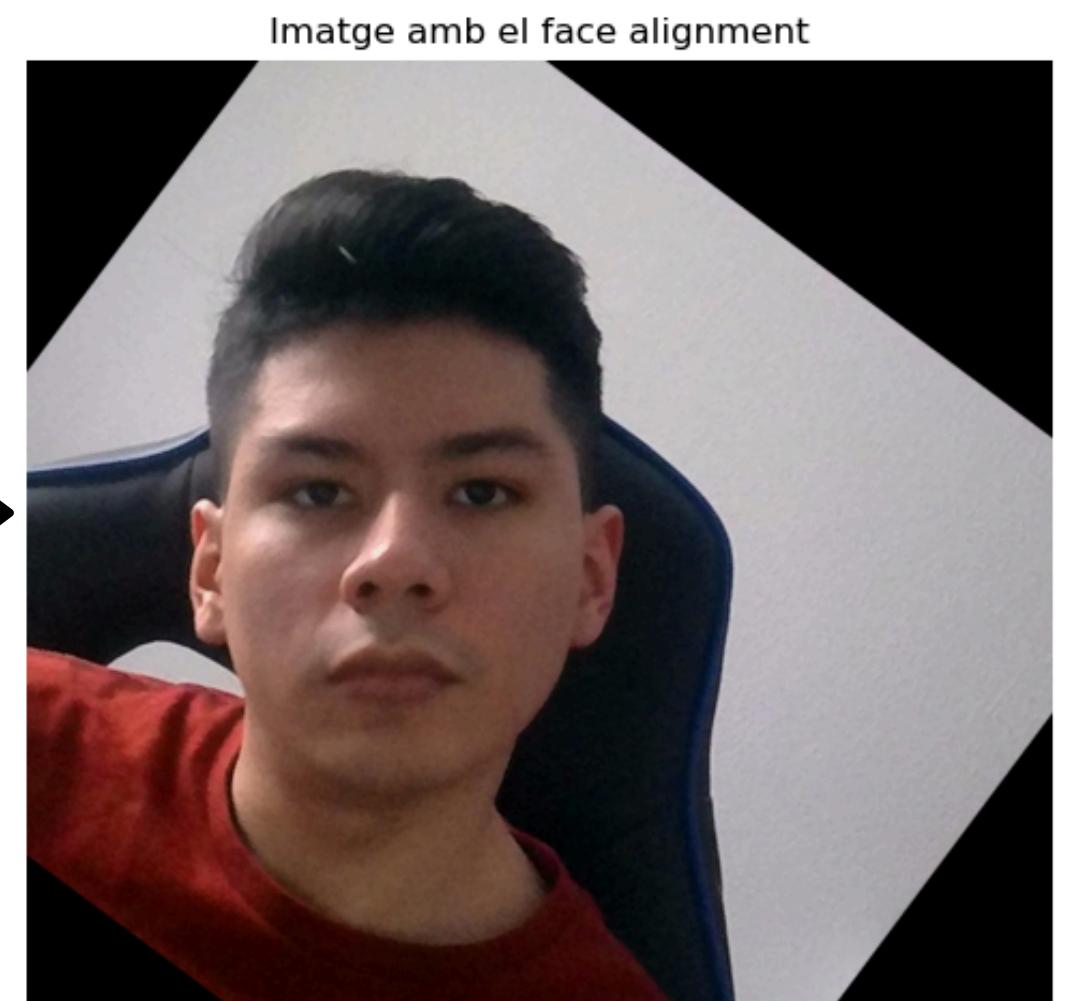
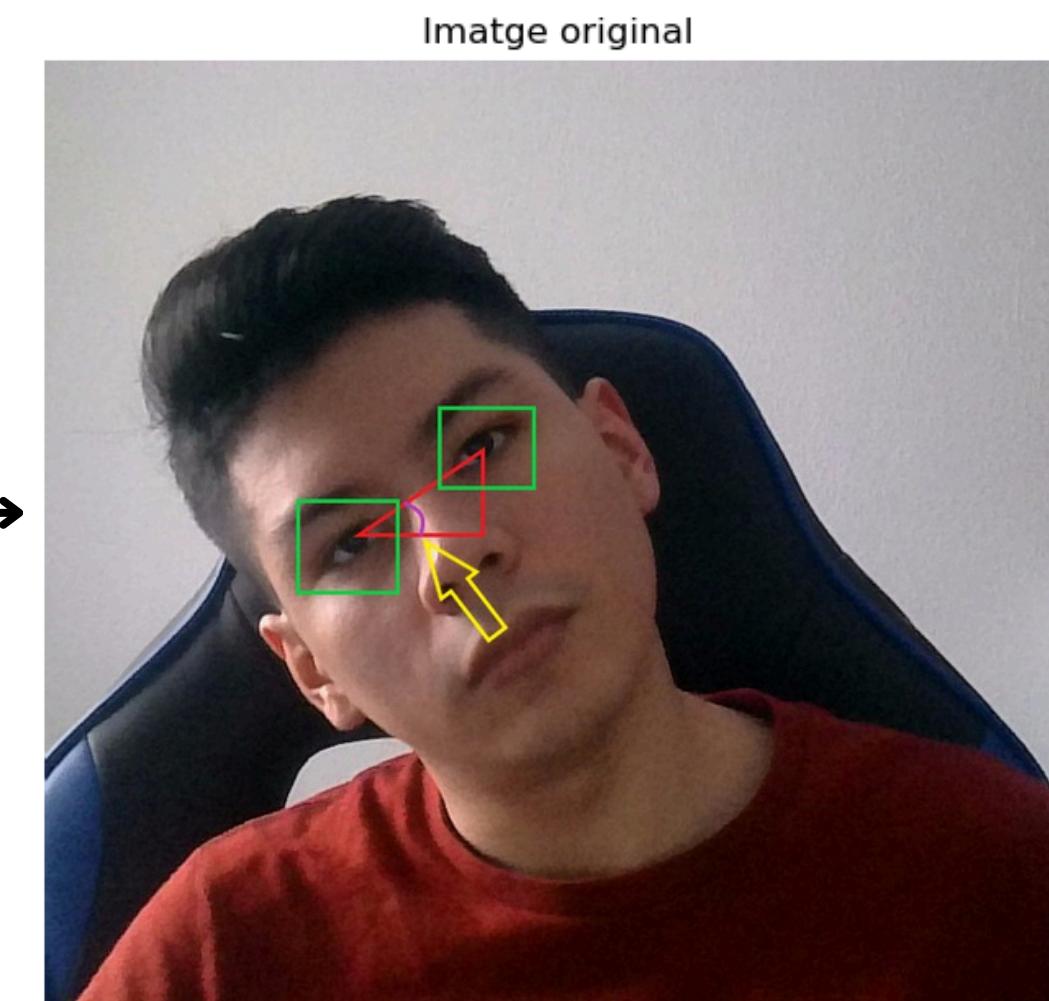
PRECISIÓ DE PREDICCIÓ: **98%**

CROSSVALIDATION SCORE: **76,2%**



RESULTATS

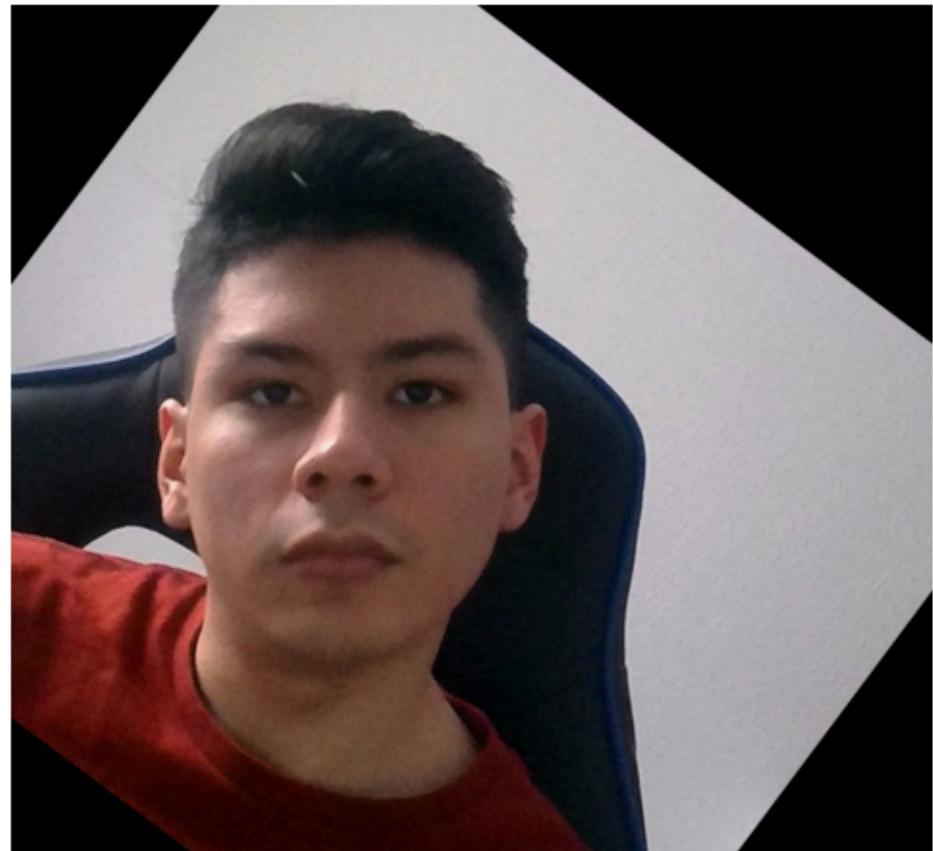
WORD RECOGNITION



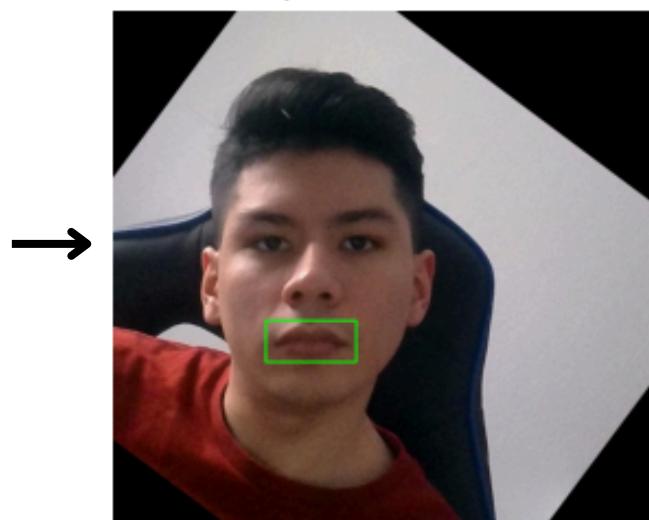
RESULTATS

WORD RECOGNITION

imatge amb el face alignment



Requadre Calculat



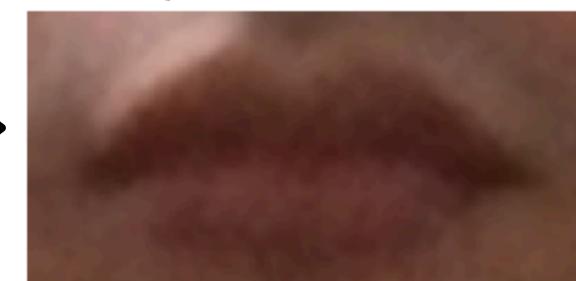
Requadre Original



Requadre Redimensionat



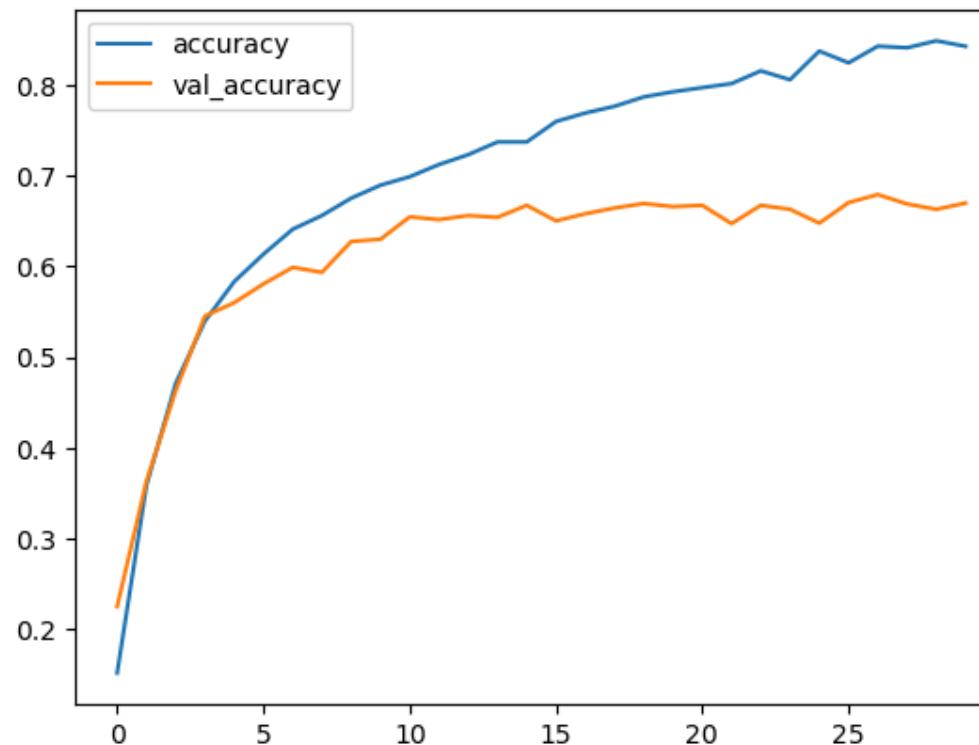
Requadre Normalitzat



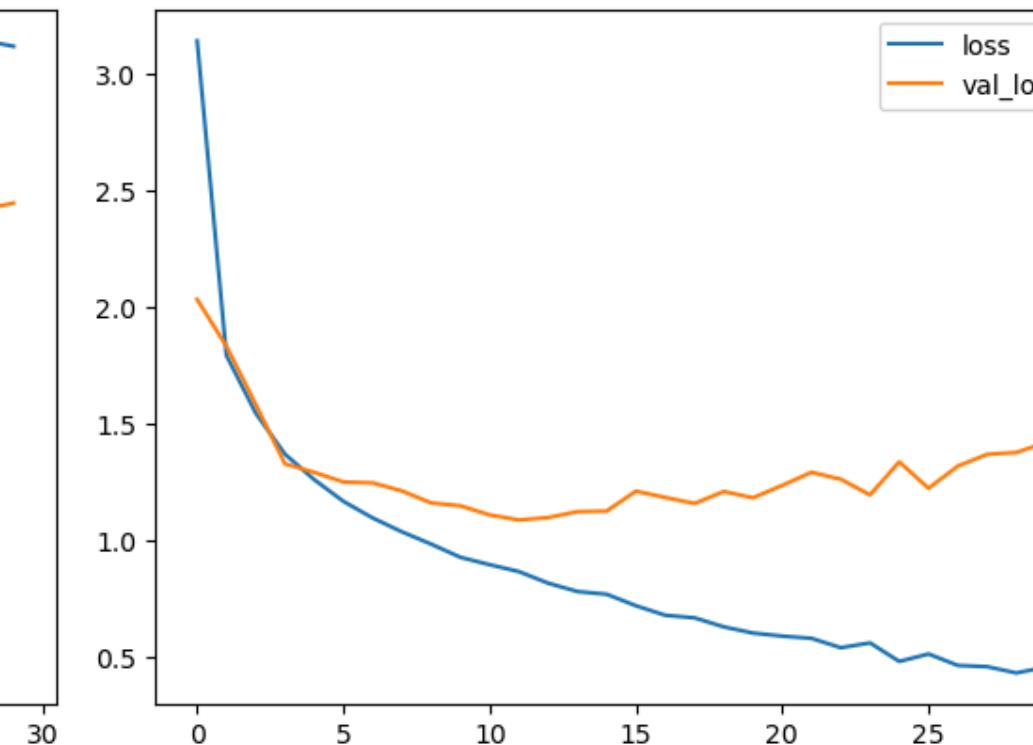
RESULTATS

WORD RECOGNITION

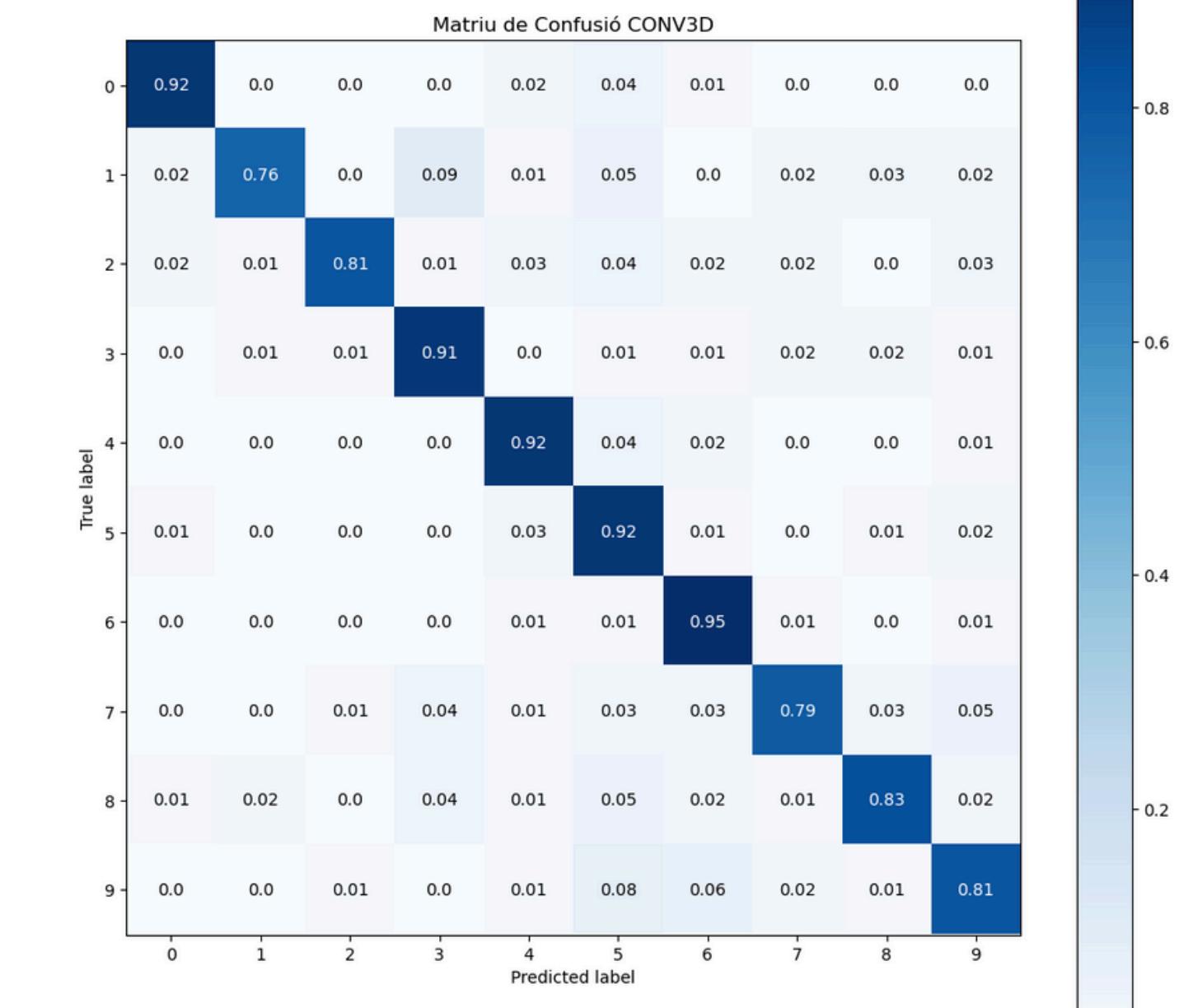
WORDS = [ATTACK, BLACK, FINAL, IMPACT,
LATER, MEDIA, OFFICE, PRESS, SPEND, WEEKS]



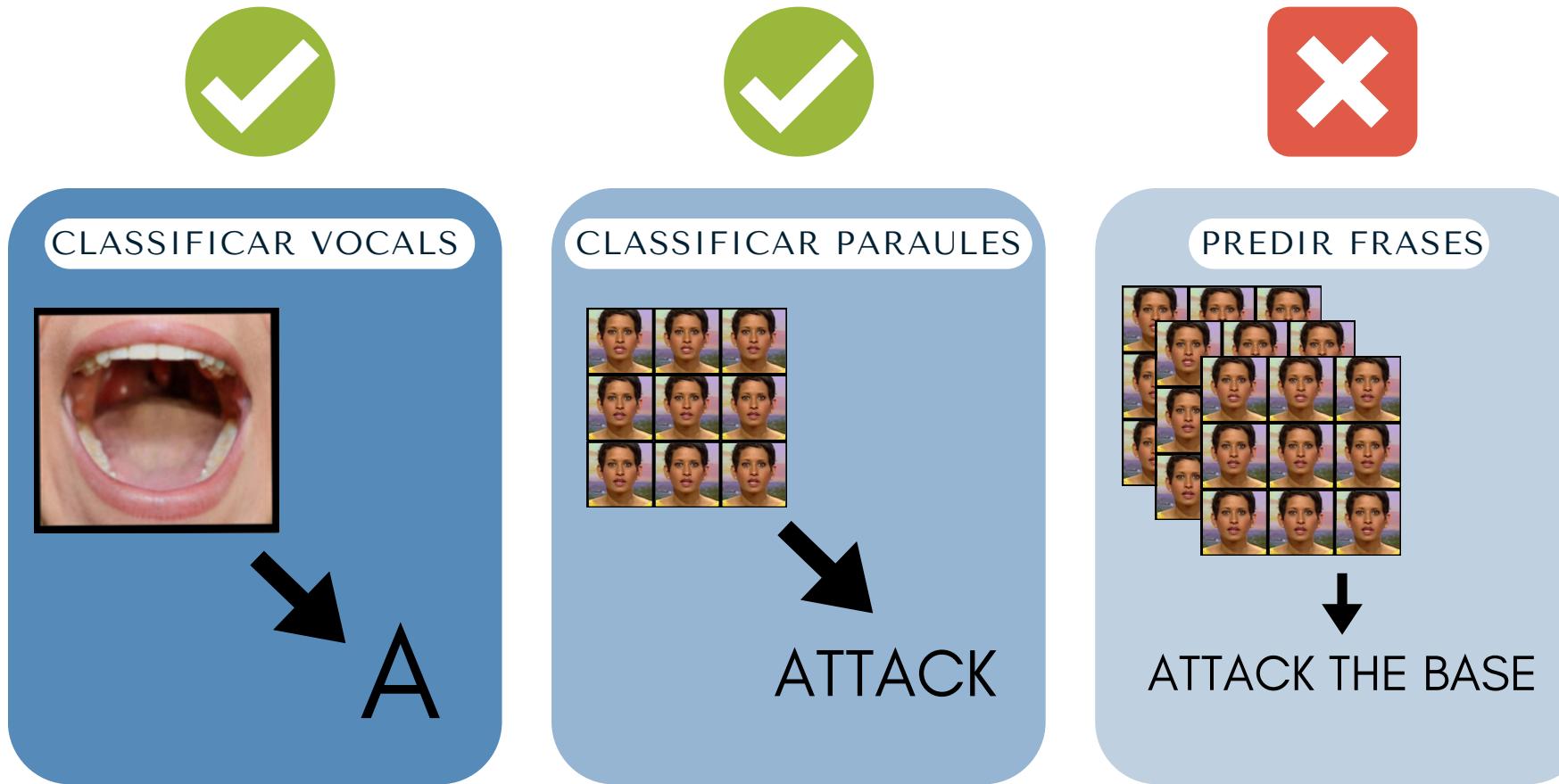
PRECISIÓ MÉS ALTA: **85%**



PRECISIÓ DE VALIDACIÓ MÉS ALTA: **70%**



CONCLUSIÓ



MÉS PARAULES

MÉS IDIOMES

ATTACK
A...
B...
C...
D...
F...
G...
H...
I...
J...
K...
L...

ATAQUE
A...
B...
C...
D...
F...
G...
H...
I...
J...
K...
L...