

# LIP READING FOR SILENT SPEECH RECOGNITION USING 3D CONVOLUTION

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MACHACA

TUTOR:  
COEN JACOBUS ANTENS

# ÍNDEX

PER QUÈ?

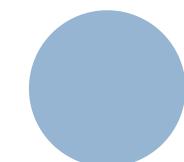
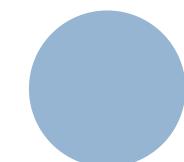
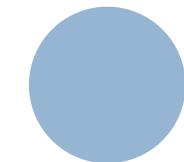
PROBLEMA

OBJECTIUS

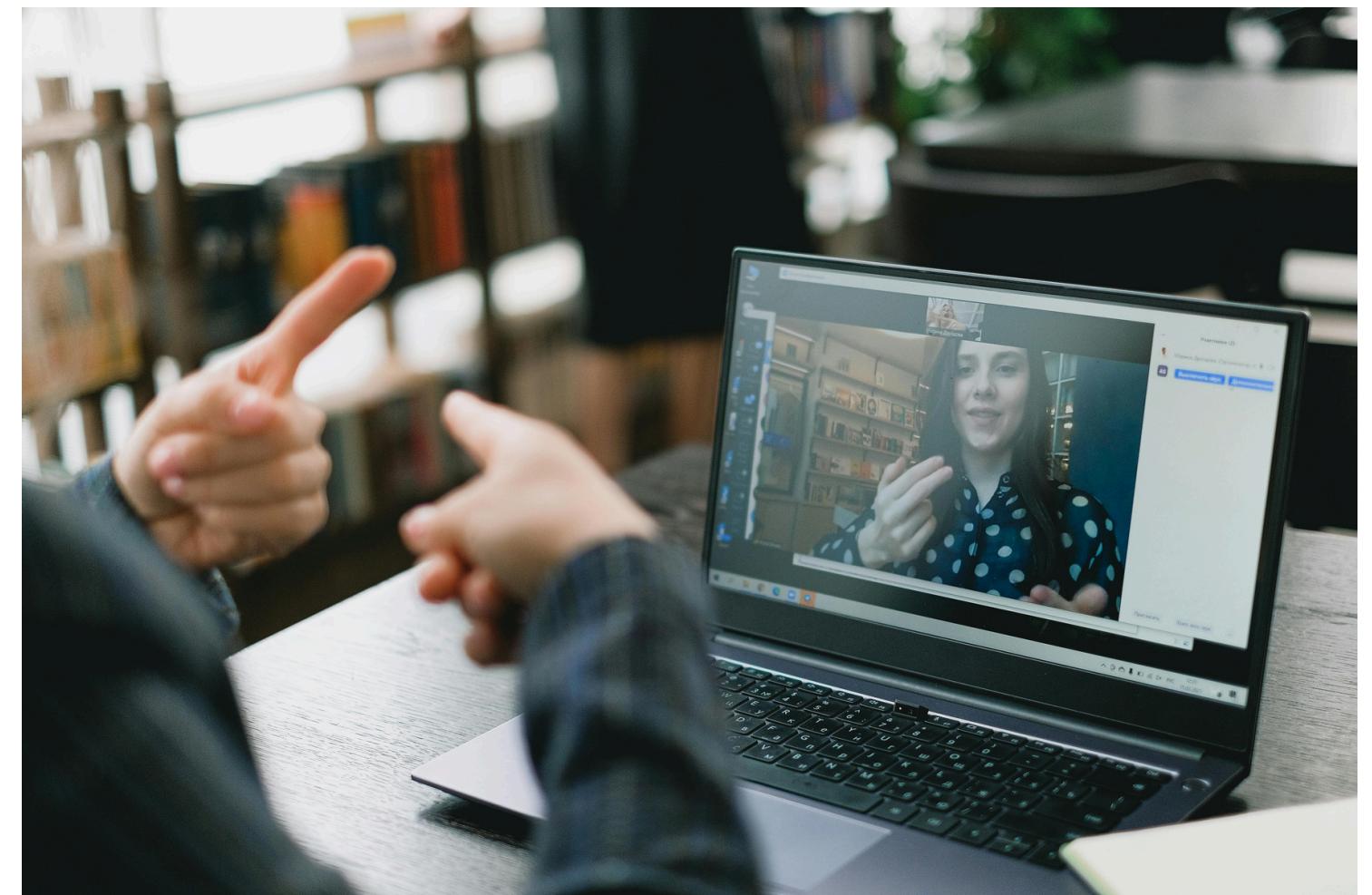
METODOLOGIA

RESULTATS

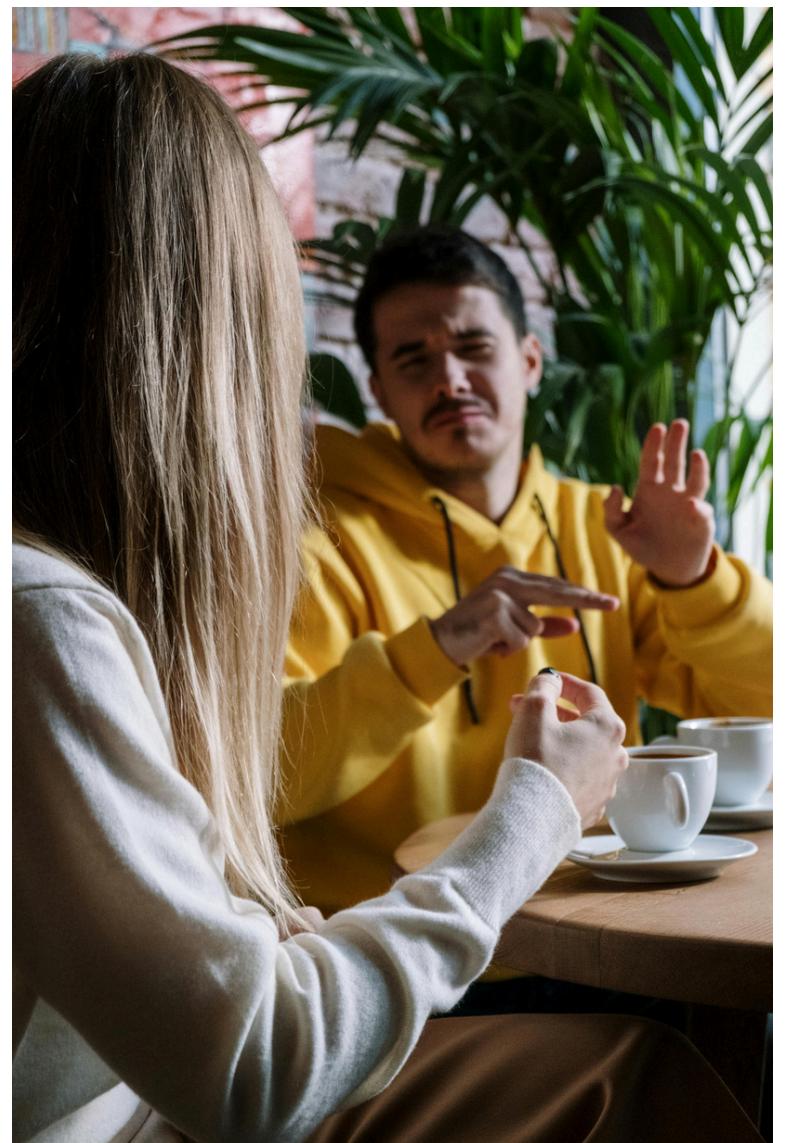
CONCLUSIÓ



# PER QUÈ 'LIP READING'?



# PROBLEMA



NO SENTEN L'IDIOMA  
DE SIGNES

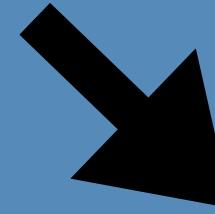
PÈRDUA D'AUDICIÓ



COMENTARIS DE  
PARTITS

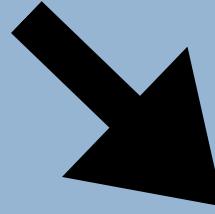
# OBJECTIUS

CLASSIFICAR VOCALS



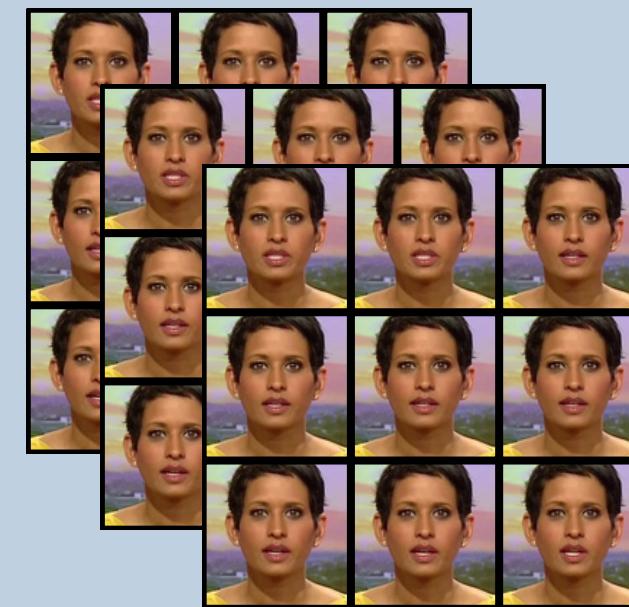
A

CLASSIFICAR PARAULES



ATTACK

PREDIR FRASES



ATTACK THE BASE

# METODOLOGIA

KANBAN



EINA

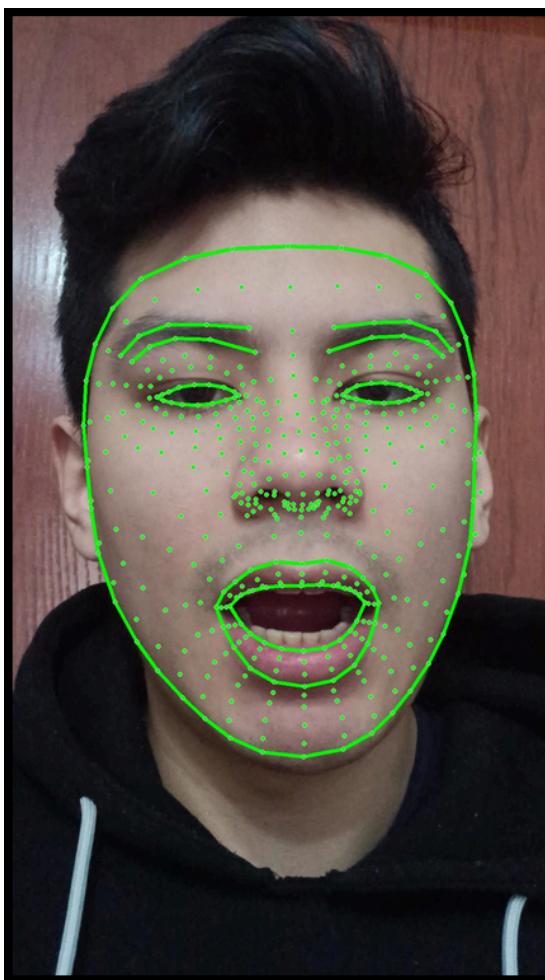
Jira Software

CRONOGRAMA



# RESULTS

## VOWEL RECOGNITION



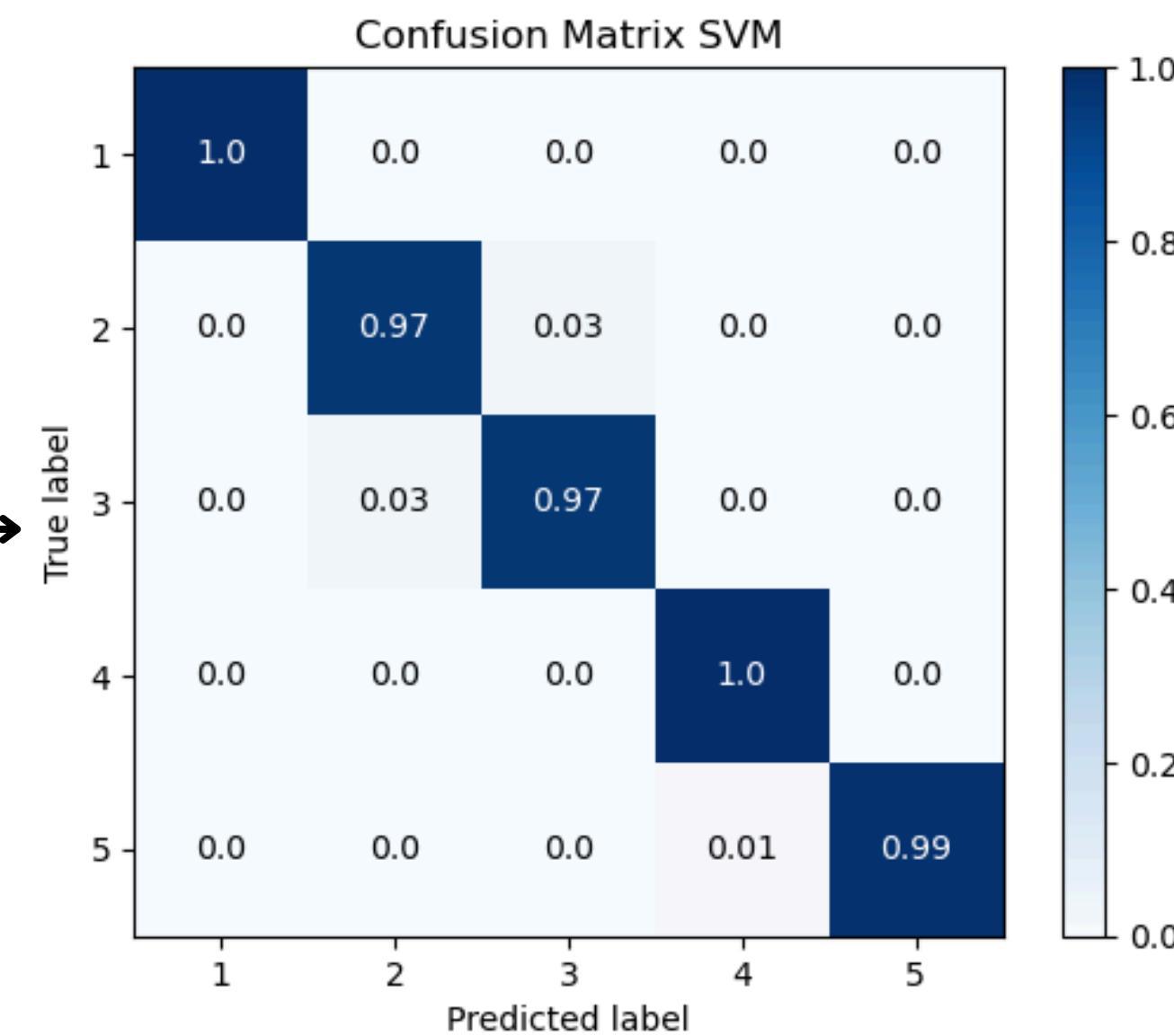
VOCAL - A

# RESULTATS

## VOWEL RECOGNITION

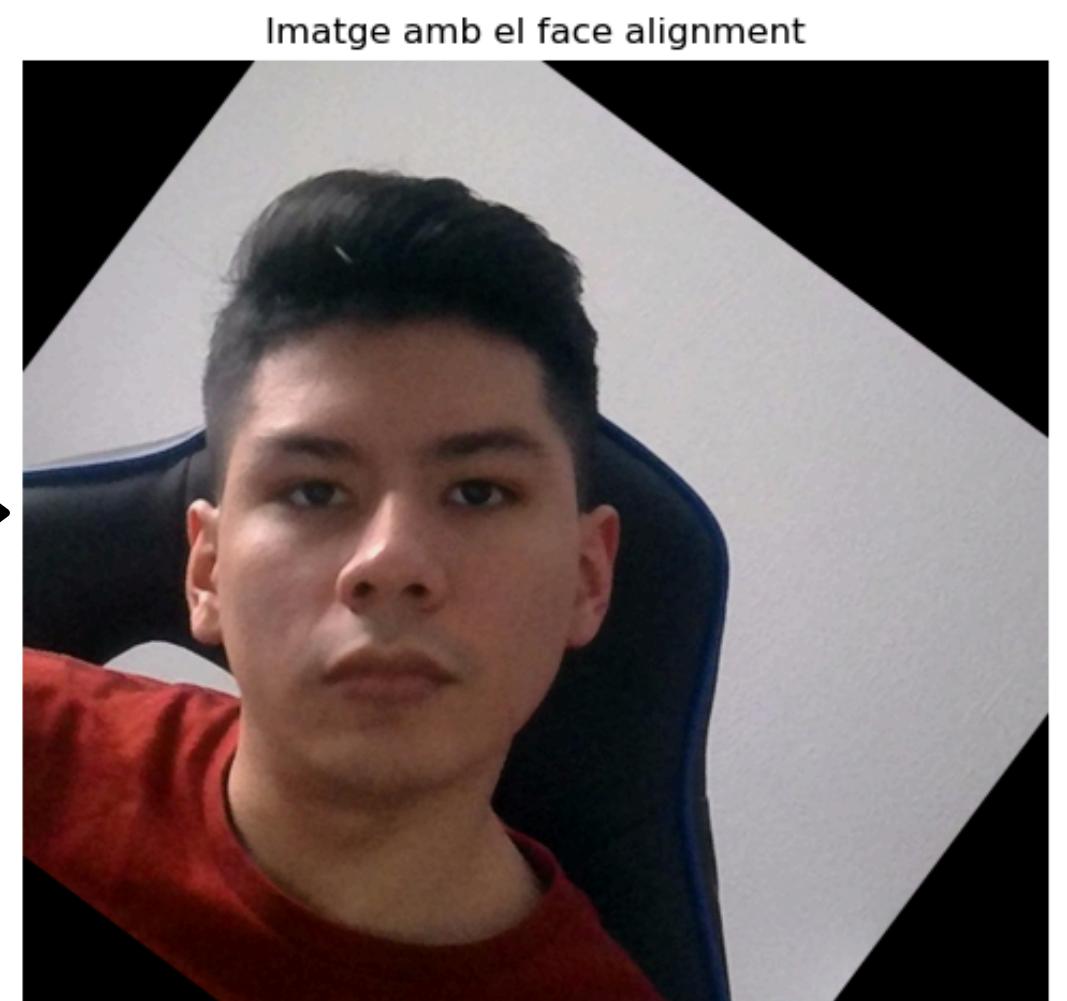
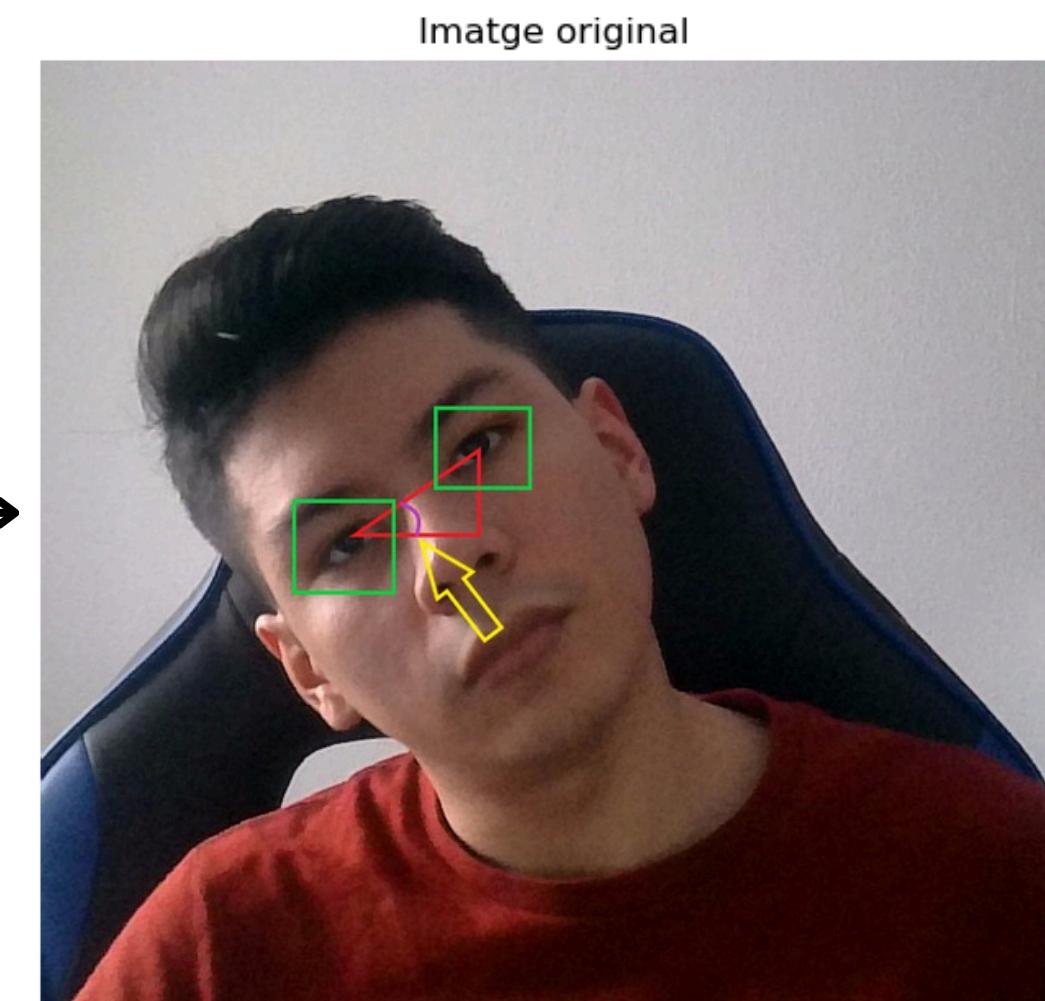
PRECISIÓ DE PREDICCIÓ: **98%**

CROSSVALIDATION SCORE: **76,2%**



# RESULTATS

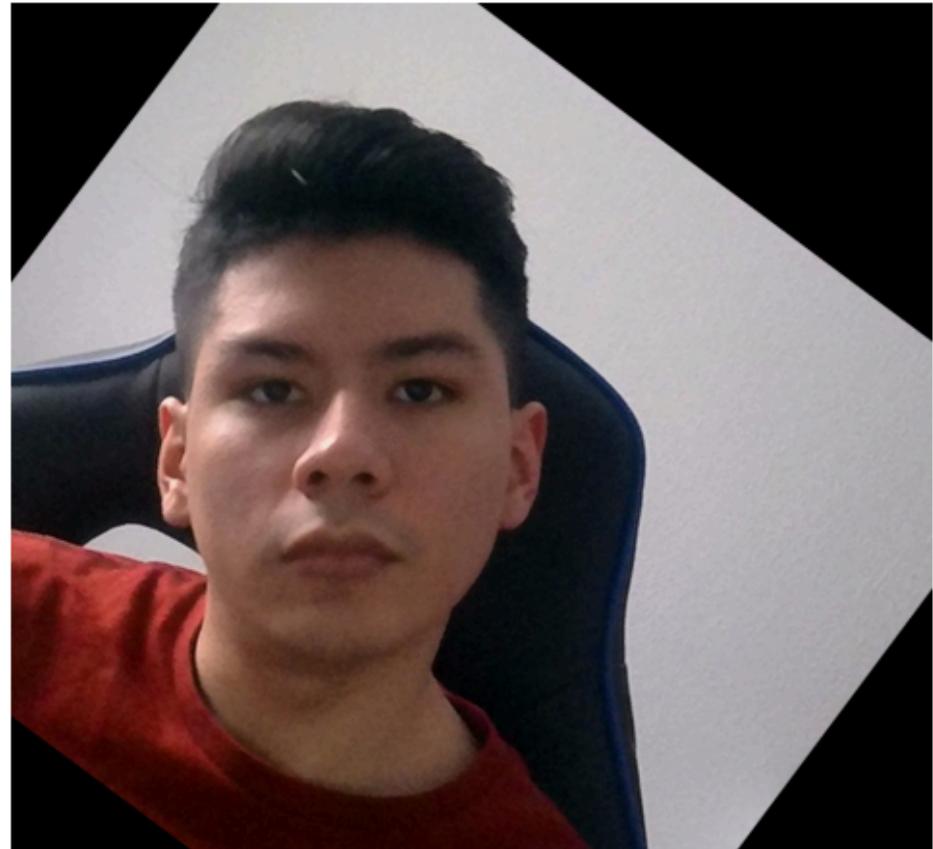
## WORD RECOGNITION



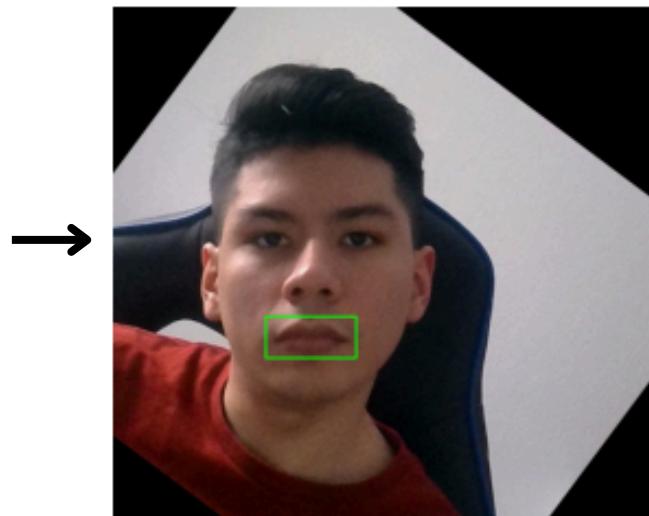
# RESULTATS

## WORD RECOGNITION

imatge amb el face alignment



Requadre Calculat



Requadre Original



Requadre Redimensionat



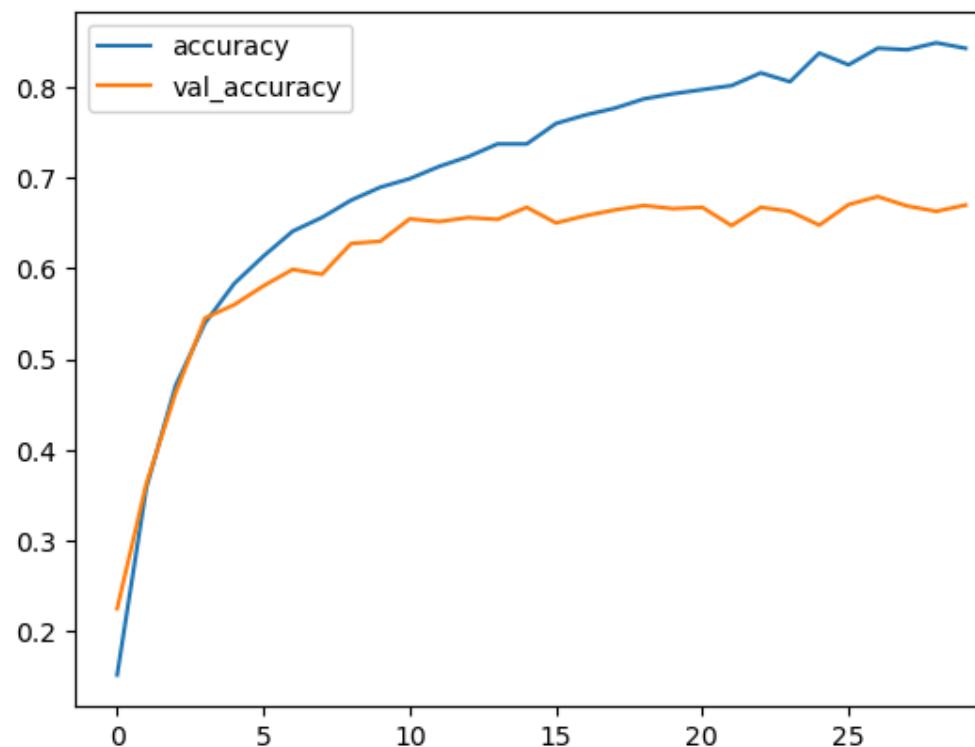
Requadre Normalitzat



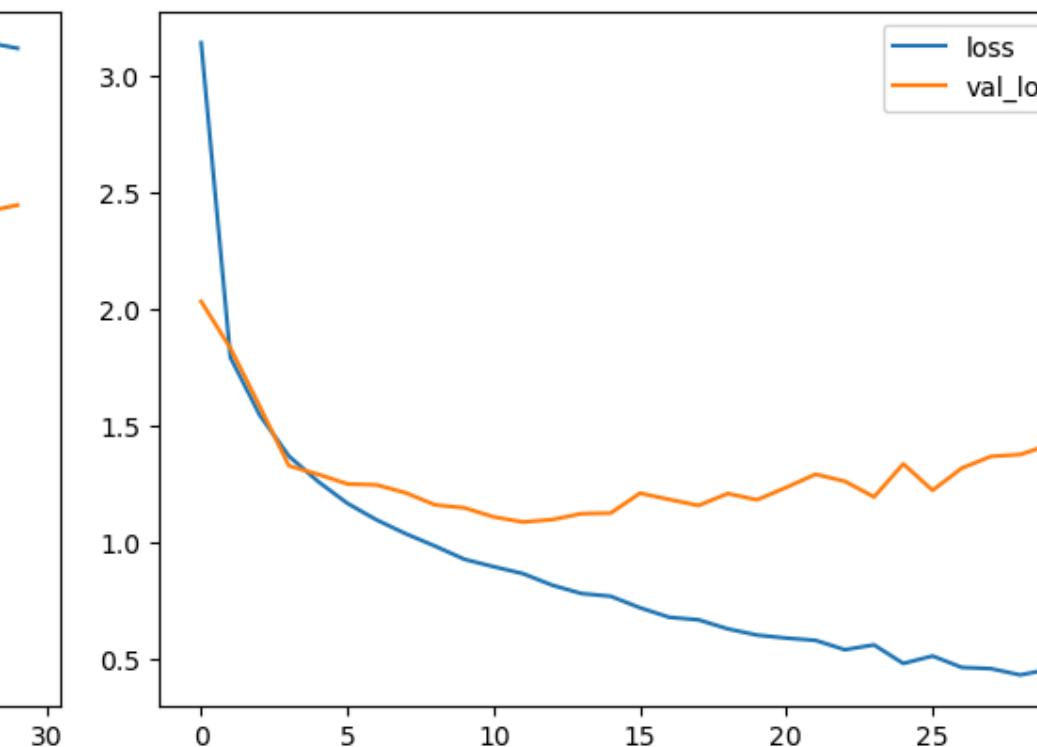
# RESULTATS

# WORD RECOGNITION

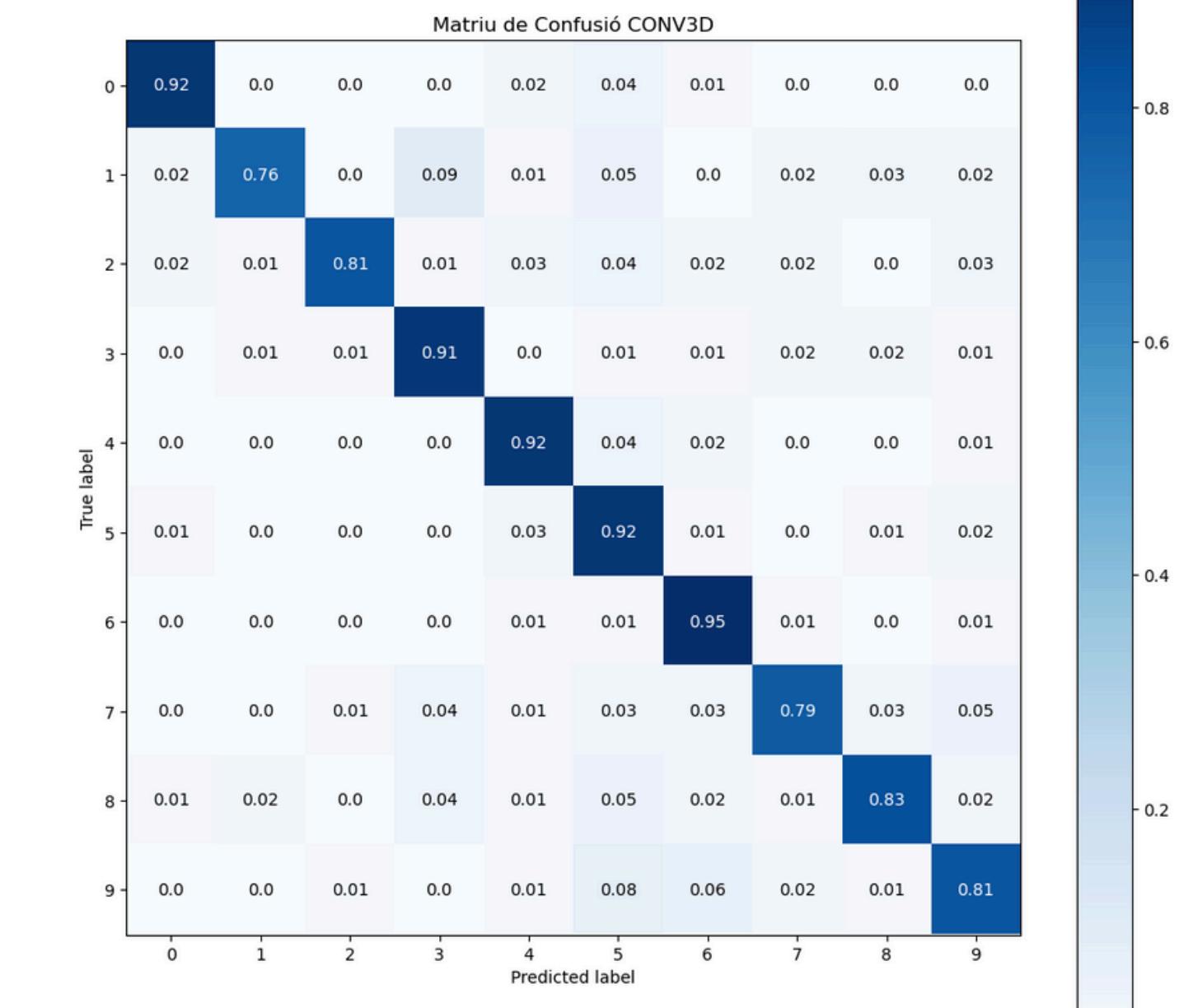
WORDS = [ATTACK, BLACK, FINAL, IMPACT,  
LATER, MEDIA, OFFICE, PRESS, SPEND, WEEKS]



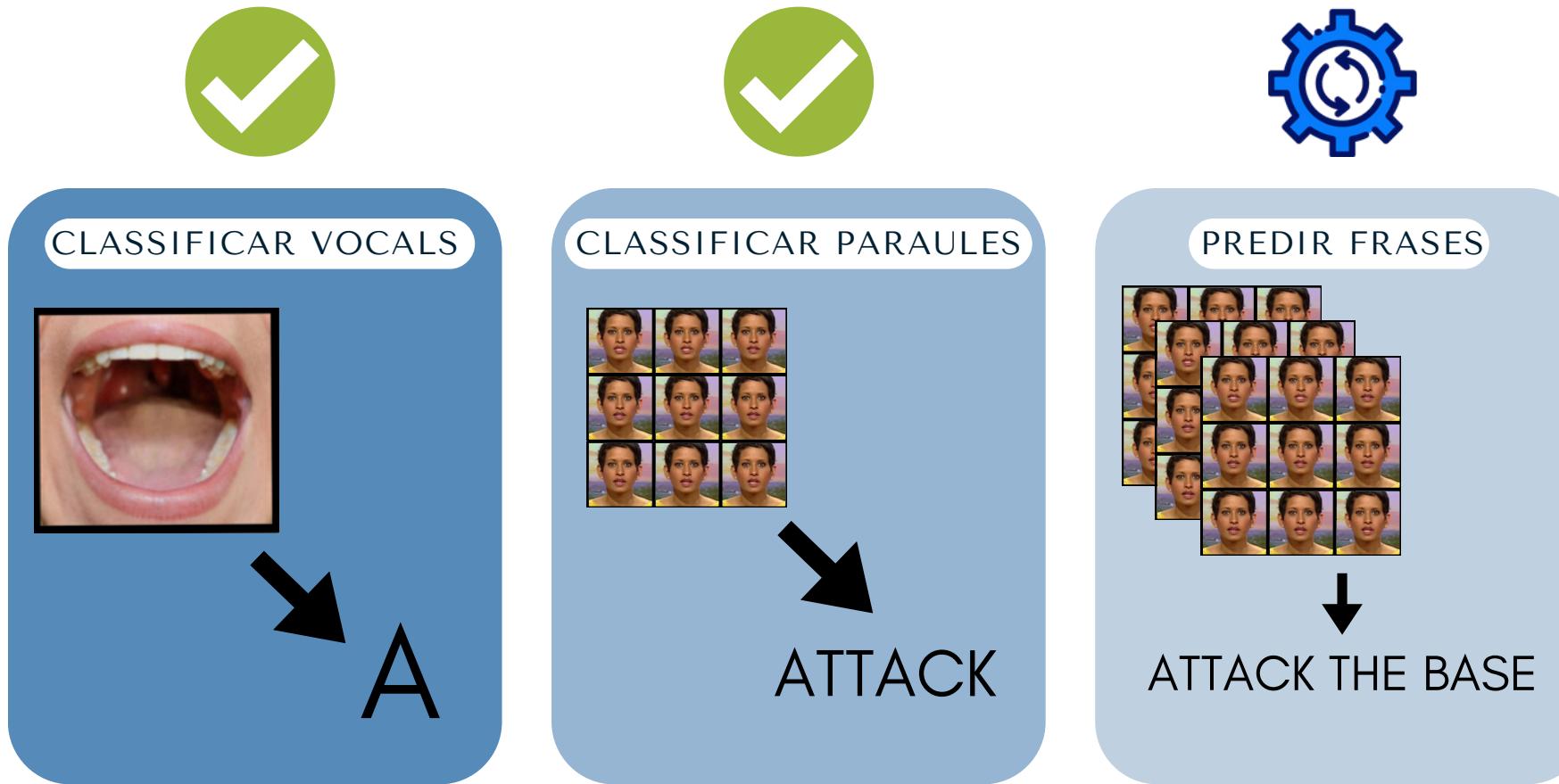
PRECISIÓ MÉS ALTA: **85%**



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

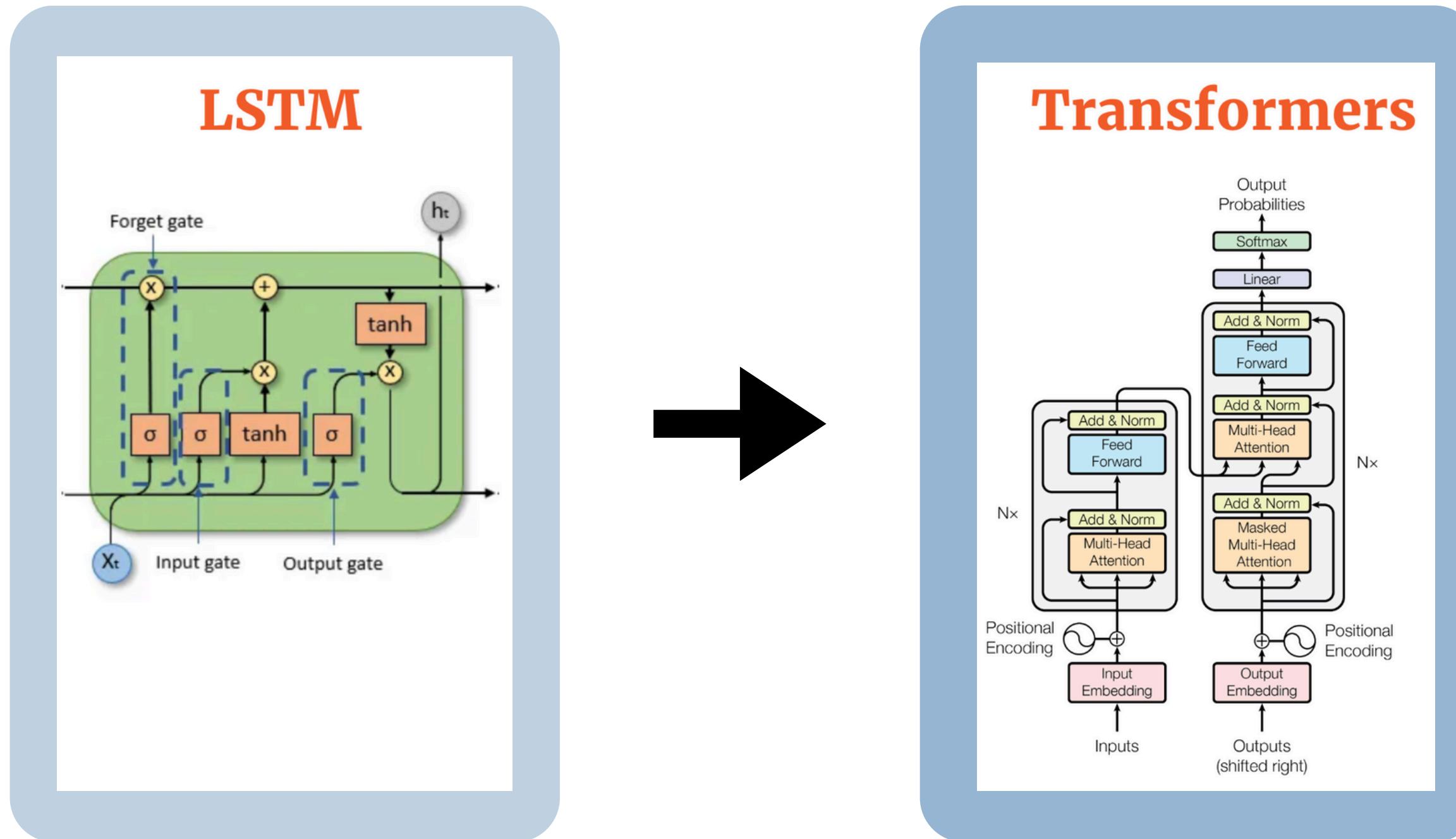


# CONCLUSIÓ



MÉS PARAULES	MÉS IDIOMES
ATTACK	ATAQUE
A...	A...
B...	B...
C...	C...
D...	D...
F...	F...
G...	G...
H...	H...
I...	I...
J...	J...
K...	K...
L...	L...

# CONCLUSIÓ



iMOLTES  
GRÀCIES!

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