

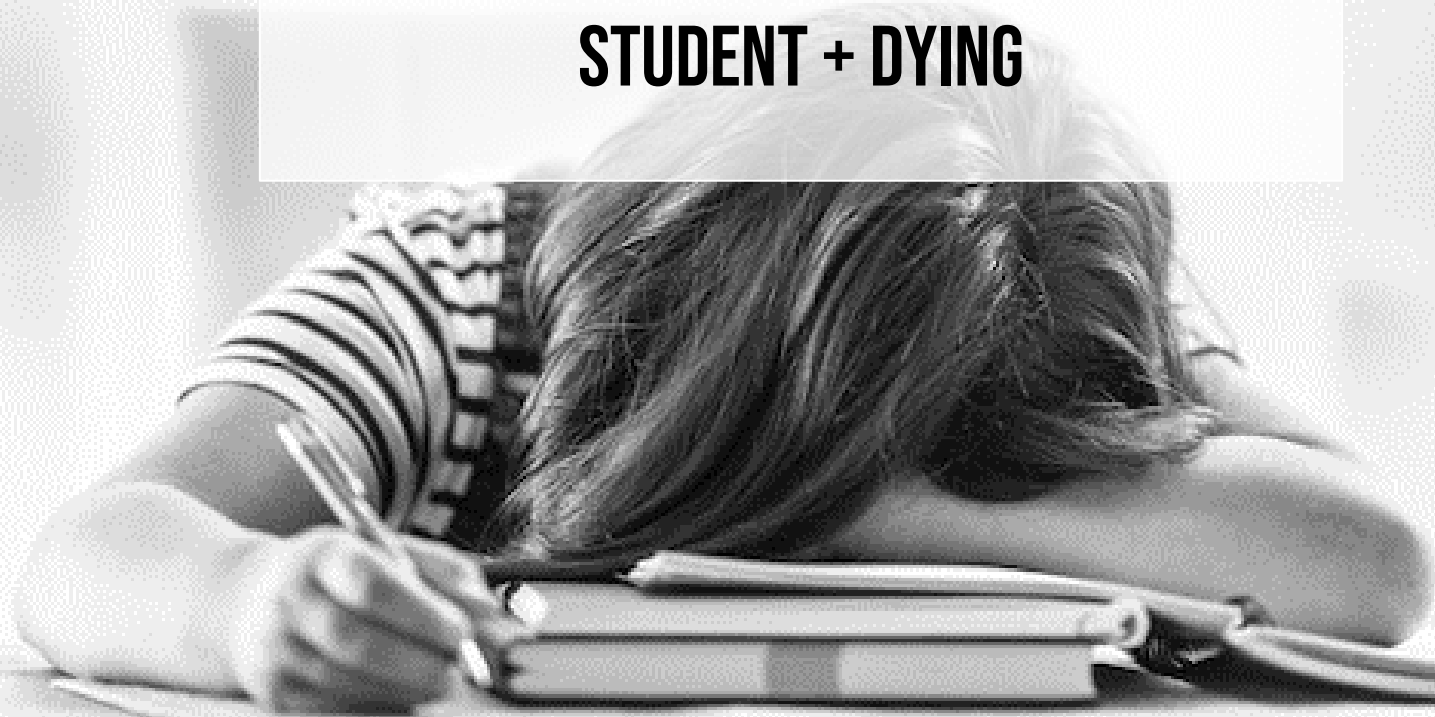
NATURAL LANGUAGE PROCESSING

NOUNS VS ADJECTIVES

18th March 2023

“STUDYING”

STUDENT + DYING



Incentivise students to take a greater interest in studying (**nouns & adjectives**) through the notion of **competition**



NOUNS



PLACES

PEOPLE



NOUNS



ANIMALS

THINGS





Adjectives are words
that *describe* nouns.



NOUN

*“Oh no! The
principal is coming!”*

PRINCIPAL



ADJECTIVE

*“Oh no! I still have to
pay off the principal
loan amount!”*

Definition:

*“That feeling when it’s an hour
to submission but you
discover a fatal error...”*

[processing]

[...]

[...]

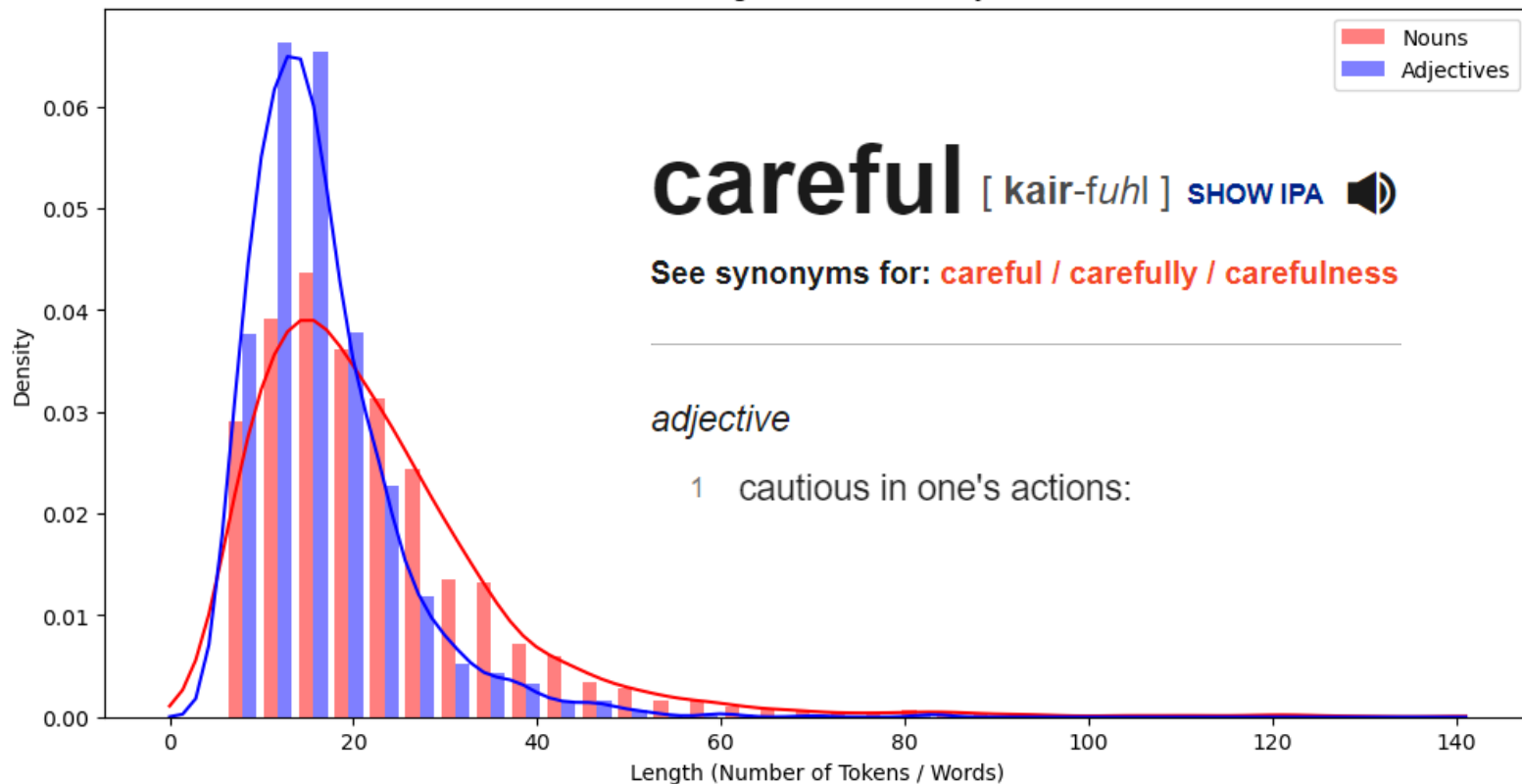
Classification:

AD-JEC-TIVE

WHAT DOES THE MODEL DO?

LENGTH OF DEFINITIONS

Distribution of length of definitions by word class



“PETER, FETCH!”



“PETER, FETCH!”

punctuation



“PETER, FETCH!”

proper noun



“PETER, **FETCH!”**

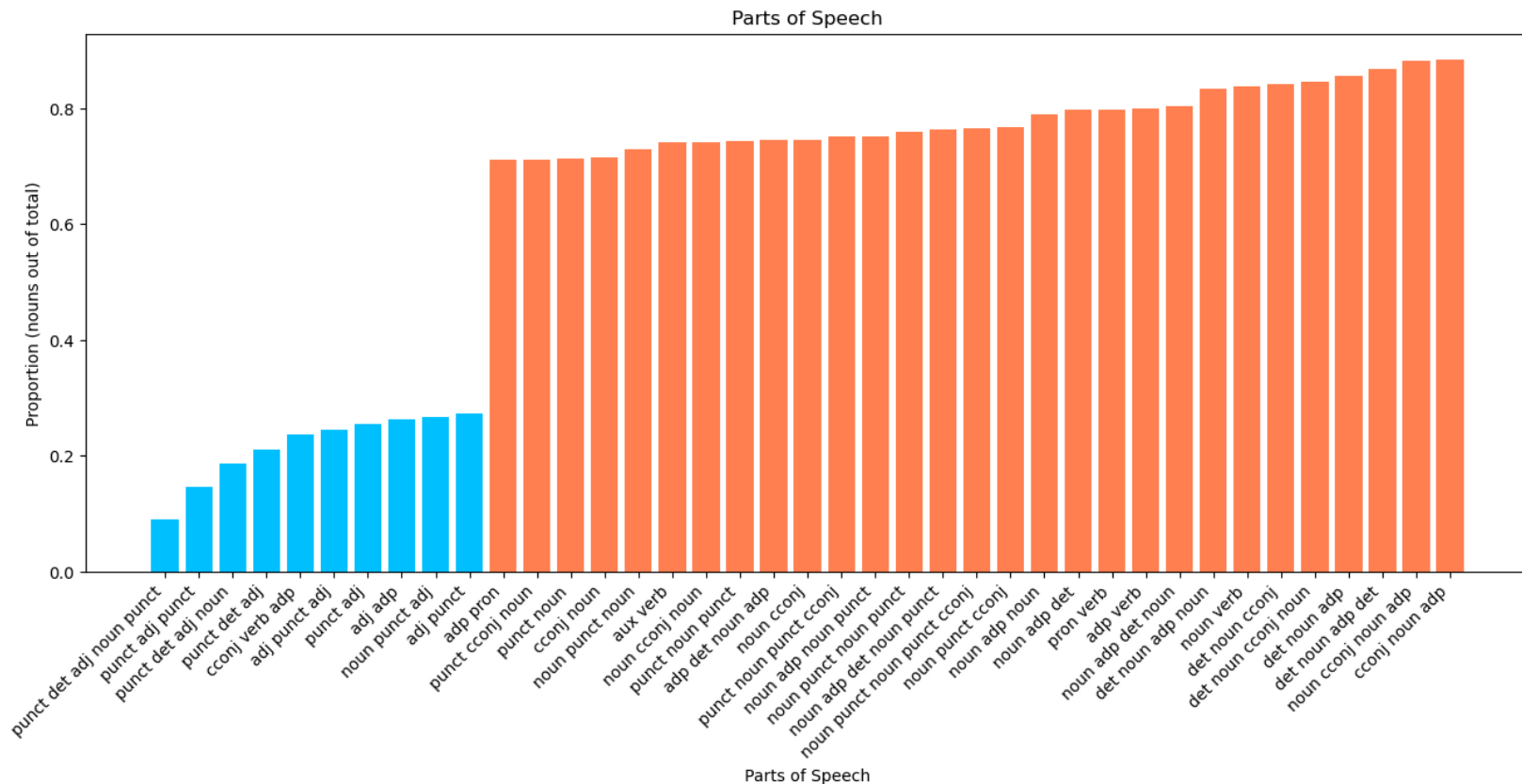
verb

“PETER, FETCH!”

punctuation proper noun punctuation verb
punctuation punctuation



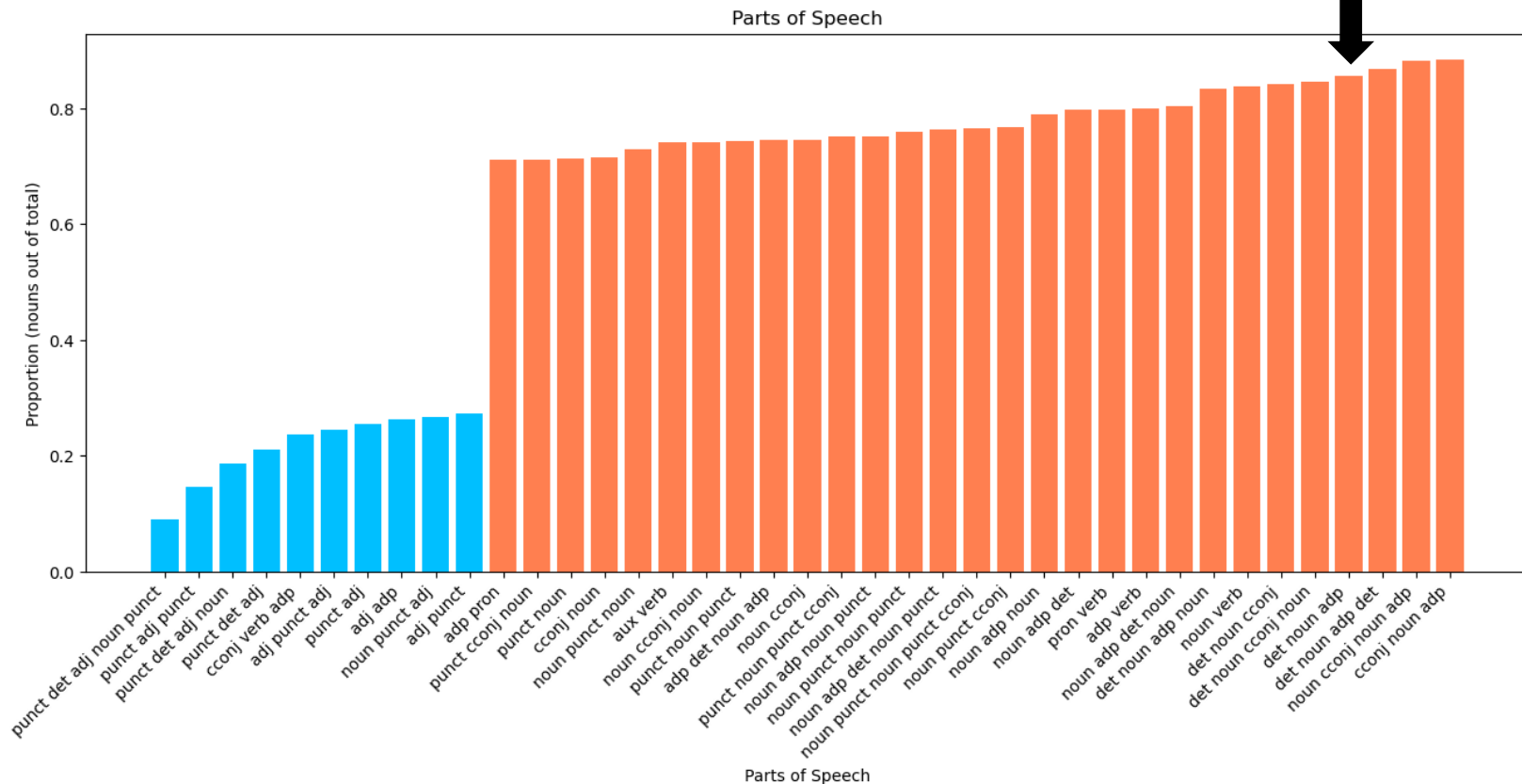
PARTS OF SPEECH



KEY FEATURES (NOUNS)



PARTS OF SPEECH



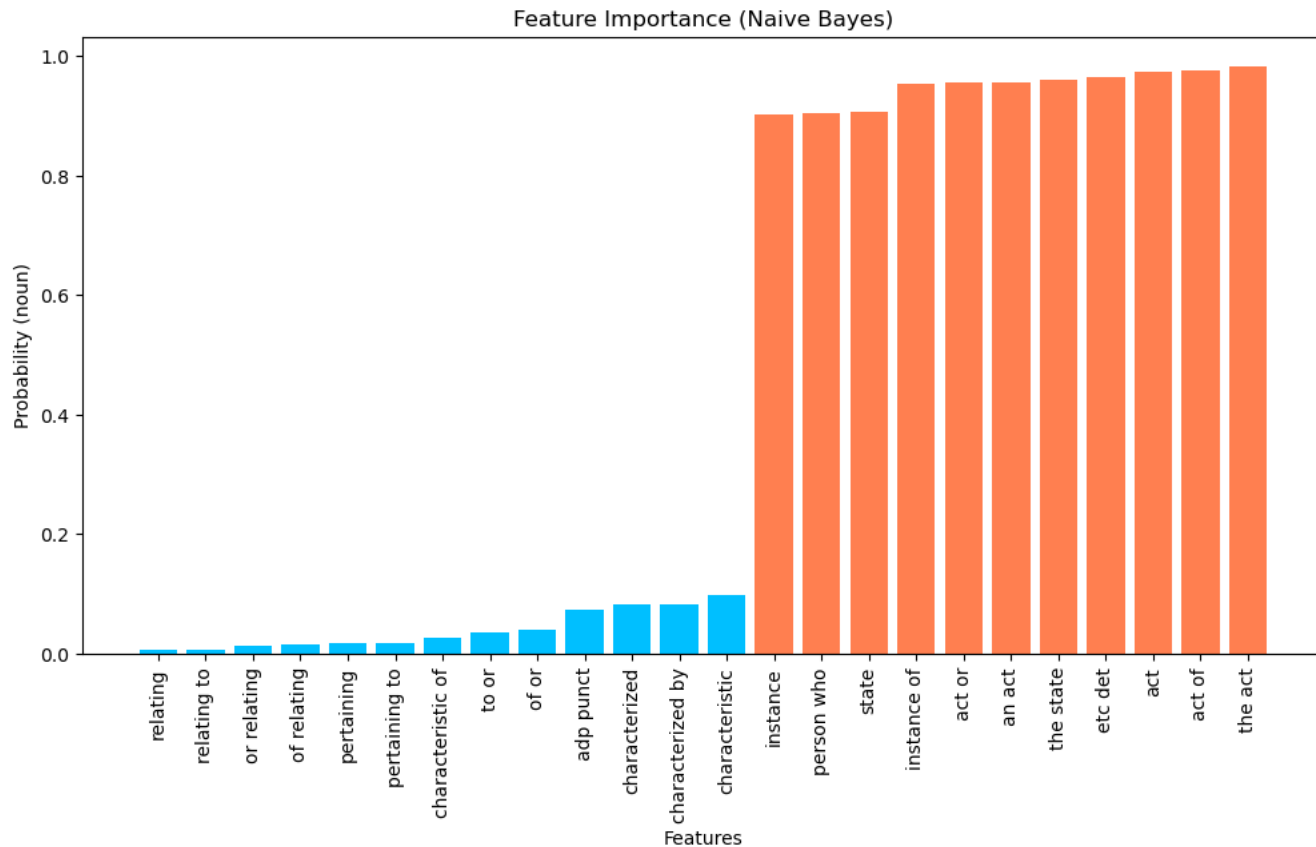
KEY FEATURES (ADJECTIVES)



NAÏVE BAYES VS LOGISTIC REGRESSION

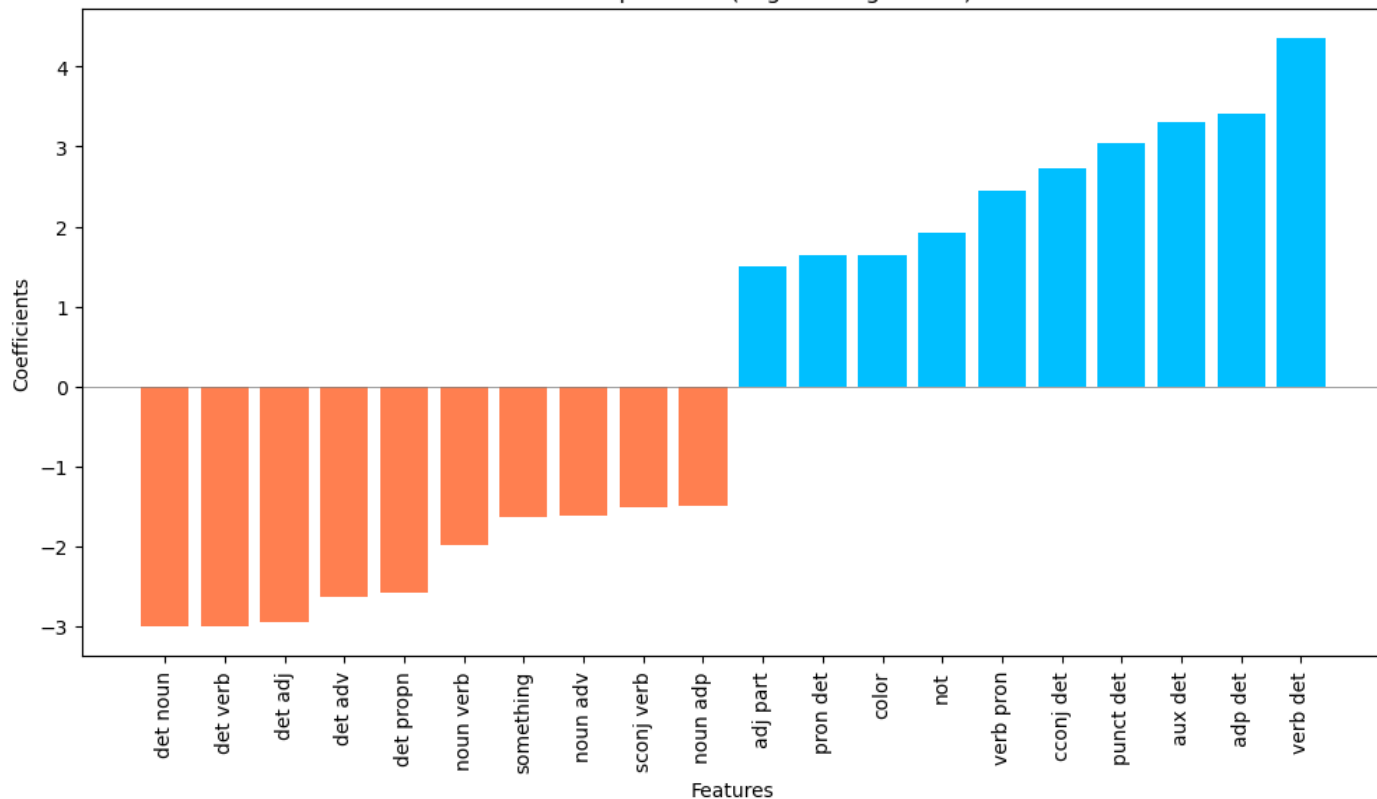
	Naïve Bayes	Logistic Regression
Accuracy (train)	0.91	0.98
Accuracy (test)	0.9	0.96
Specificity	0.91	0.96
Recall	0.89	0.95
Precision	0.91	0.96
F1	0.9	0.95

NB: PROBABILITIES



LR: COEFFICIENTS

Feature Importance (Logistic Regression)



MODEL APPLICATIONS



“BEST OUT OF 10?”

Models never whine
when they lose!

CONTEXTUAL CLUES

Models can do your
homework for you!



---{ Difficulty }---

- ☐ Just press 'W'
- ☐ Easy
- ☒ Easy to learn / Hard to master
- ☐ Significant brain usage
- ☐ Difficult
- ☐ Dark Souls



MODEL APPLICATIONS



“BEST OUT OF 10?”

Models never whine
when they lose!

CONTEXTUAL CLUES

Models can do your
homework for you!



ACCURACY ‘TUNING’

Models can boost your
self-esteem!

WHAT'S NEXT?

"I may be small, but I
make my presence
known."

- Every chihuahua

