

Diversity News Article Text Classification

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TEXT CLASSIFICATION



MISSION

Classify and categorize text using natural language processing



GOAL

Determine if article mentions racial diversity positively or negatively



Text



Classification
Model

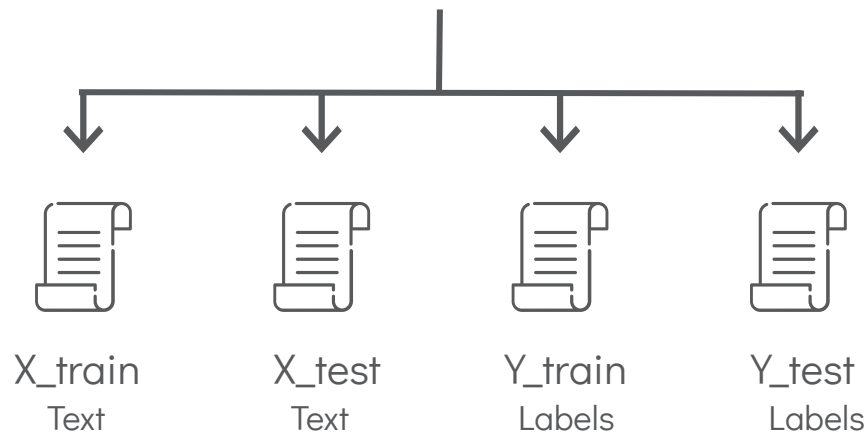


Classified Labels

DATA SETS



News Article Data



MODEL

begin training using triangular learning rate policy with max lr of 1e-05...

Epoch 1/20

1056/1056 [=====] - 522s 476ms/step - loss: 0.3849 - accuracy: 0.8389 - val_loss: 0.1804 - val_accuracy: 0.9268

Epoch 2/20

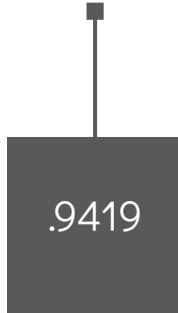
1056/1056 [=====] - 500s 472ms/step - loss: 0.1701 - accuracy: 0.9377 - val_loss: 0.1598 - val_accuracy: 0.9419

Epoch 3/20

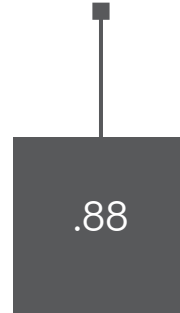
1056/1056 [=====] - 499s 472ms/step - loss: 0.1518 - accuracy: 0.9477 - val_loss: 0.1675 - val_accuracy: 0.9362

EVALUATION METRICS

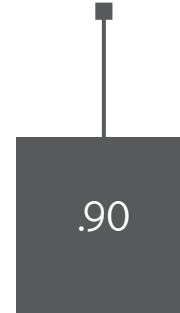
Precision



Recall



F1



CLASSIFYING AN ARTICLE

```
predictor.explain('How PepsiCo plans to increase gender, racial diversity in management')
```

y=1 (probability **0.987**, score **4.342**) top features

Contribution?	Feature
+5.311	Highlighted in text (sum)
-0.969	<BIAS>

how pepsico plans to increase gender, racial diversity in management

CLASSIFYING AN ARTICLE

```
predictor.explain('A patriotic education should include Black history')
```

y=1 (probability **0.853**, score **1.758**) top features

Contribution?	Feature
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+2.560	Highlighted in text (sum)
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-0.802	<BIAS>
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a patriotic education should include black history

Thank you!

