

05.12.24

Machine Learning With TensorFlow

NLP IN TENSORFLOW PART I

- QUIZ
- ASSIGNMENTS
- OPEN DISCUSSION
- EVALUATION METRICS

QUIZ



<https://forms.office.com/e/aCLYqgcimd>

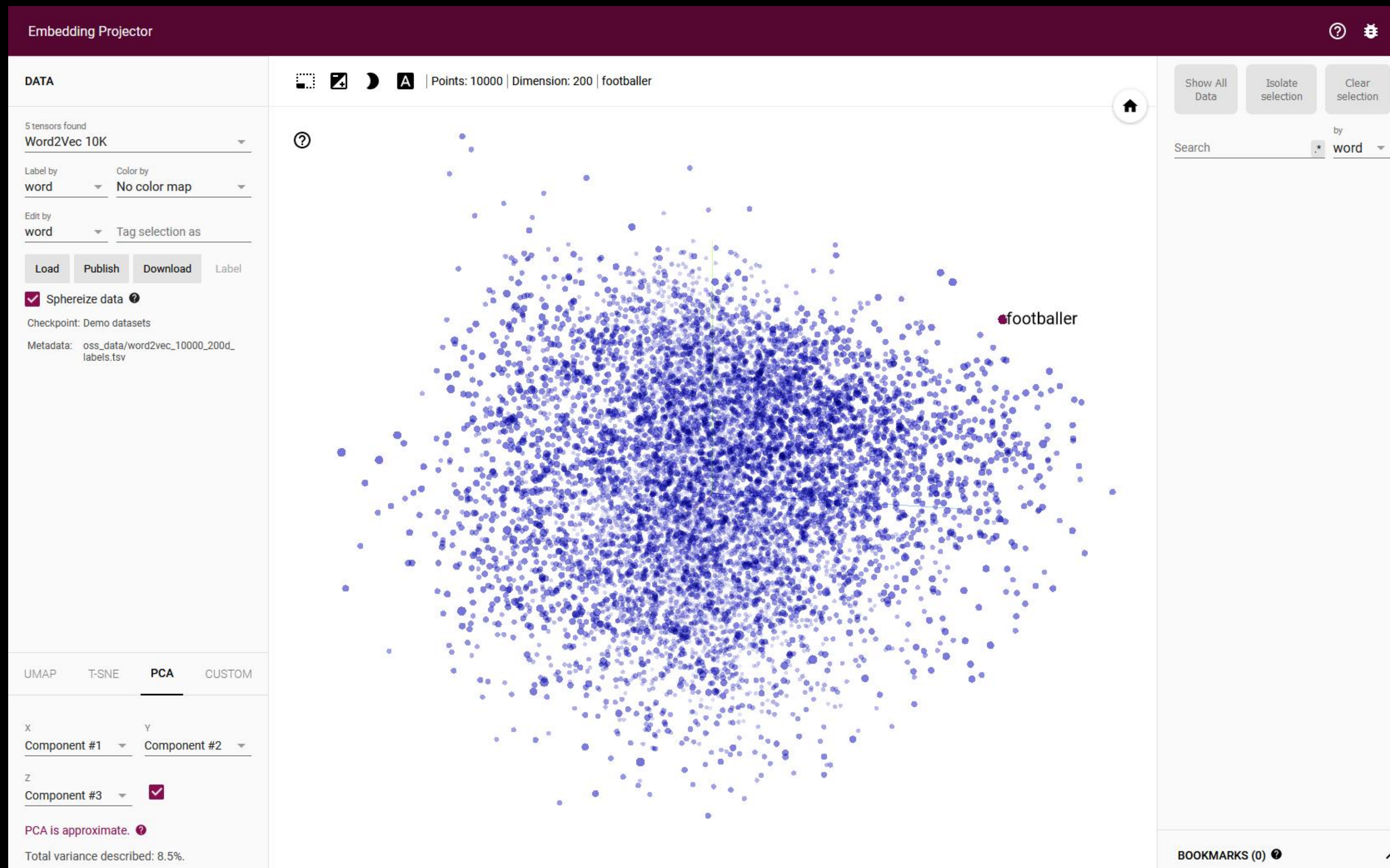
ASSIGNMENTS

ASSIGNMENTS NEXT WEEK?

OPEN DISCUSSION

- How is it decided if a word is a stop word or not?
- Would it make sense to use Transfer Learning for the Embedding layer? What would it mean to do that?
- What is the result of the Global Average Pooling (1D) Layer after the embedding layer?

EMBEDDING PROJECTOR



EVALUATION METRICS (CLASSIFICATION)

- Accuracy
- Balanced Accuracy
 - Average of accuracies for each class
- Precision
 - How many false positives?
- Recall
 - How many false negatives?
- F1-Score
 - Harmonic (!) mean of Precision and Recall
- ...

EVALUATION METRICS (REGRESSION)

- Mean Absolute Error (MAE)
- Mean Squared Error (MSE)
 - Stronger punishment of large errors
- Root Mean Squared Error (RMSE)
- Mean Absolute Percentage Error (MAPE)
- R^2
 - Proportion of variance explained by the model
- ...

PROJECTS MILESTONES

- 07.11. Project pitches
- 14.11. Form groups
- 21.11. Literature review
- 28.12. Dataset characteristics
- 05.12. Baseline model
- 12.12. Model evaluation
- 19.12. (Feedback session)
- 02.01./09.01. Final model optimization
- 16.01./23.01. Project presentations

TASKS UNTIL NEXT WEEK

- Completion of the learning material of week 3 and 4 of the NLP course
- Complete the assignment notebook
- Decide on an evaluation metric and evaluate your baseline model