

## How to predict text input

**General note: Python's Keras package is used in A LOT of these examples; I think we need to use it.**

- <https://towardsdatascience.com/next-word-prediction-with-nlp-and-deep-learning-48b9fe0a17bf>
- Does next word prediction using NLP and deep learning.
- However, I think it requires a large dataset, such as all your email or WhatsApp messages. Not sure if feasible.
- Code is provided
  
- <https://medium.com/analytics-vidhya/build-a-simple-predictive-keyboard-using-python-and-keras-b78d3c88cffb>
- This makes a predictive keyboard, predicting the next most likely word to be said.
- Drawback: is only trained and thus only knows how to use words from the input dataset. Other words of the English language can thus not be predicted.
- Code is provided
  
- <https://towardsdatascience.com/exploring-the-next-word-predictor-5e22aeb85d8f>
- Uses LSTM approach, so the predictor has some memory from what has been said before
- (Look at the second approach of the article, the first approach is inferior)
- Code is provided
  
- <https://shalabhsingh.github.io/Text-Generation-Word-Predict/>
- Some more on word prediction
- Code is provided
  
- In general: use a LSTM neural network, with the package Keras
- Pre-processing the data is essential
- Example code can be found in the linked articles
- We have to decide whether we just want to import our own dataset, because like said earlier, the model can then only predict words that are in our own dataset. (maybe that's not a problem though?)
- Most of the stuff I found online was kind of similar, that's why there's only 4 links.