# Keyword extraction with recurrent neural network Marek Mura

Cosine distances

Cosine distance

### Overview

- -Keyword extraction
- -Document categorization
- -LSTM recurrent neural network
- Words represented as feature vectors

## Method

- Words are transformed into feature vectors
- Feature vectors enter the LSTM module
- The output vector is normalised and sent to the softmax function
- Cosine distance word feature vectors from the output vector

## Conclusions

- -Data speaks for itself
- -Data decides best keywords



- Words from the articles are converted into feature vectors



- A generalization of logistic regression - Outputs a probabilistic distribution of

- The "Forget" gate decides about keeping or discarding data

- Maps words into latent feature vectors

- Vectors also capture word semantics

- Word similarity = Cosine similarity of

- Articles and categories from the Slovak