

Lecture: Word Embeddings

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Video:

Overview

2 min
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Video:

Basic Word Representations

3 min
- ✓

Video:

Word Embeddings

3 min
- ✓

Video:

How to Create Word Embeddings

3 min
- ✓

Video:

Word Embedding Methods

3 min
- ✓

Video:

Continuous Bag-of-Words Model

3 min
- ✓

Video:

Cleaning and Tokenization

4 min
- ✓

Video:

Sliding Window of Words in Python

3 min
- ✓

Video:

Transforming Words into Vectors

2 min
- Lab:

Lecture Notebook - Data Preparation

30 min
- ✓

Video:

Architecture of the CBOW Model

3 min
- ✓

Video:

Architecture of the CBOW Model: Dimensions

3 min
- ✓

Video:

Architecture of the CBOW Model: Dimensions 2

2 min
- ✓

Video:

Architecture of the CBOW Model: Activation Functions

4 min
- Lab:

Lecture Notebook - Intro to CBOW model

30 min
- ✓

Video:

Training a CBOW Model: Cost Function

4 min
- ✓

Video:

Training a CBOW Model: Forward Propagation

3 min
- ✓

Video:

Training a CBOW Model: Backpropagation and Gradient Descent

4 min
- Lab:

Lecture Notebook - Training the CBOW model

40 min
- ✓

Video:

Extracting Word Embedding Vectors

2 min
- Lab:

Lecture Notebook - Word Embeddings

20 min
- Lab:

Lecture notebook: Word embeddings step by step

1h
- ✓

Video:

Evaluating Word Embeddings: Intrinsic Evaluation

3 min
- ✓

Video:

Evaluating Word Embeddings: Extrinsic Evaluation

2 min
- ✓

Video:

Conclusion

2 min
- Assignment: Word Embeddings
- </>

Programming Assignment:

Word Embeddings

3h
- ✓

Reading:

Acknowledgments

10 min



Acknowledgments

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Eddy Shyu revised lectures and assignments, and recruited and managed alpha testers, curriculum authors, and code review consultants.

Ryan Keenan provided lecture design training to curriculum authors, guided lecture revisions, recruited and managed the entire team.

Ortal Arel provided program management for the instructors, on-camera coaching, and handled instructor recruitment.

Lara Pheat-Pitzer provided program management for the entire team.

Curriculum developers revised lectures and slides, and also wrote scripts and quizzes based on alpha tester feedback.

Course 1 week 1: Daniel Villarraga

Course 1 week 2: Andres Castillo

Course 1 week 3: Daniel Villaraga

Course 1 week 4: Eddy Shyu

Final script editing for all lectures by Arden Thira

Course 2 week 1: Peter Henricks

Course 2 week 2: Konstantin Thierbach

Course 2 week 3: Petra Vanickova

Course 2 week 4: Sebastien Pujadas

Final script editing for all lectures by Arden Thira

Course 3 week 1: Daniel Villarraga

Course 3 week 2: Daniel Villarraga

Course 3 week 3: Arden Thira

Course 3 week 4: Peter Henricks, Ryan Keenan, Eddy Shyu

Code Review Consultants revised graded assignments and curriculum engineers worked on the autograder.

Course 1 week 1: Paul Mielke, Andres Castillo

Course 1 week 2: Gordon Robinson, Andres Castillo

Course 1 week 3: Miguel Martinez, Parth Agrawal

Course 1 week 4: Tomislav Bukic, Eddy Shyu, Parth Agrawal

Course 2 week 1: Parth Agrawal, Geoff Ladwig, Eddy, Shyu, Andres Zarta

Course 2 week 2: Geoff Ladwig, Andres Zarta

Course 2 week 3: Kota Mori, Andres Zarta

Course 2 week 4: Manfred Vogel, Miguel Martinez, Andres Zarta, Eddy Shyu

Course 3 week 1: Manish Jain, Eddy Shyu, Parth Agrawal

Course 3 week 2: Luis Alaniz, Eddy Shyu, Parth Agrawal

Course 3 week 3: Arden Thira, Geoff Ladwig, Parth Agrawal

Course 3 week 4: Manfred Vogel, Geoff Ladwig, Parth Agrawal

Curriculum engineers and curriculum developers built ungraded labs (“lecture notebooks”) to help prepare learners for the graded assignments.

Course 1 week 1: Andres Castillo

Course 1 week 2: Andres Castillo

Course 1 week 3: Andres Castillo

Course 1 week 4: Andres Castillo