



Overview

Week 1

Week 2

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Grades

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Discussion Forums

Messages

Course Info

Week 3

Natural Language Processing with Probabilistic Models

Week 3

Discuss this week's modules here.
41 threads · Last post 2 days ago

Go to forum

Autocomplete and Language Models



Learn about how N-gram language models work by calculating sequence probabilities, then build your own autocomplete language model using a text corpus from Twitter!

Key Concepts

- Conditional probabilities
- Text pre-processing
- Language modeling
- Perplexity
- K-smoothing
- N-grams
- Backoff
- Tokenization

Less

Lecture: Autocomplete

▶ Video: N-Grams: Overview 3 min

Resume

▶ Video: N-grams and Probabilities 7 min

▶ Video: Sequence Probabilities 5 min

▶ Video: Starting and Ending Sentences 8 min

📄 Lab: Lecture notebook: Corpus preprocessing for N-grams 1h

▶ Video: The N-gram Language Model 6 min

📄 Lab: Lecture notebook: Building the language model 1h

▶ Video: Language Model Evaluation 6 min

▶ Video: Out of Vocabulary Words 4 min

▶ Video: Smoothing 6 min

📄 Lab: Lecture notebook: Language model generalization 1h

▶ Video: Week Summary 1 min

Assignment: Autocomplete

🔗 Programming Assignment: Assignment: Autocomplete 3h Due Oct 12, 1:59 AM CDT