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Course Info

# Week 2

Natural Language Processing with Classification and Vector Spaces

## Week 2

Discuss this week's modules here.  
261 threads · Last post 19 hours ago

Go to forum

## Sentiment Analysis with Naïve Bayes



Learn the theory behind Bayes' rule for conditional probabilities, then apply it toward building a Naive Bayes tweet classifier of your own!

## Key Concepts

- Error analysis
- Naive Bayes inference
- Log likelihood
- Laplacian smoothing
- conditional probabilities
- Bayes rule
- Sentiment analysis
- Vocabulary creation
- Supervised learning

Less

## Lecture: Naive Bayes

▶ Video: Probability and Bayes' Rule 2 min

Resume

▶ Video: Bayes' Rule 3 min

▶ Video: Naive Bayes Introduction 5 min

▶ Video: Laplacian Smoothing 2 min

▶ Video: Log Likelihood, Part 1 5 min

▶ Video: Log Likelihood, Part 2 1 min

▶ Video: Training Naive Bayes 3 min

📄 Lab: Visualizing likelihoods and confidence ellipses 1h

▶ Video: Testing Naive Bayes 4 min

▶ Video: Applications of Naive Bayes 3 min

▶ Video: Naive Bayes Assumptions 3 min

▶ Video: Error Analysis 3 min

## Assignment: Naive Bayes

🔗 Programming Assignment: Assignment: Naive Bayes 3h

Due Oct 5, 1:59 AM CDT