

Machine Learning

Week 4 - Decision Trees



About the course

Announcements

- Assignment for this week is already in the Notebooks folder
- Notebooks can be done as group (2-3 ppl)
- This week I'll let you work in groups in order to complete the in-class notebook will be there to answer questions
- This week's read is an article about cross-entropy

Previously on ML..



Decision Trees

Definition

Decision tree learning is one of the predictive modelling approaches used in statistics, data mining and machine learning. It uses a **decision tree** (as a predictive model) to go from **observations** about an item (represented in the **branches**) to conclusions about the item's **target value** (represented in the **leaves**).

Decision Tree Classifier: The Gini method

https://www.youtube.com/watch?v=7VeUPuFGJHk&t=465s&ab_channel=StatQuestwithJoshStarmer

What is cross-entropy

<http://colah.github.io/posts/2015-09-Visual-Information/>

AdaBoost

<https://towardsdatascience.com/boosting-algorithm-adaboost-b6737a9ee60c>

https://www.youtube.com/watch?v=LsK-xG1cLYA&ab_channel=StatQuestwithJoshStarmer



Conclusion