# **Association Rule Mining**

- Apriori
- FP GROWTH WITH LIFT

https://www.youtube.com/watch?v=ejKGCy80RN8&list=PLVqWg8KffRp2W7no9LNm7CdcQ78XrWj7M

# **Sequential Pattern Mining**

Generalized search mining

https://www.youtube.com/watch?v=aR5270l3YMg https://www.youtube.com/watch?v=zVPg6Q6hitk

# **Decision Trees**

• DECISION TREE WITH GINI

https://www.youtube.com/watch?v=gwgmSSTdiXs&list=PLKnIA16 RmvYGY n9PP8zN-0LG9MoZRjU

for Entropy, Information Gain Calculation

https://discourse.opengenus.org/t/using-id3-algorithm-to-build-a-decision-tree-to-predict-the-weather/3343

### **Ensemble methods**

- Voting regressor
- Bagging

Soft voting

Hard voting

https://www.voutube.com/watch?v=m5E6QxKFYIM

https://www.youtube.com/watch?v=OgK8JFjkSto&list=PLTKMiZHVd\_2KyGirGEvKlniaWeLOHhUF3

https://www.youtube.com/watch?v=bHK1fE\_BUms&list=PLKnIA16\_RmvZyqP3WGUo7iVzillea 1bp

https://www.youtube.com/watch?v=74DU02Fyrhk

### **Random Forest**

Cross-validation

K-fold

Stratified kfold

Leave One-p-out validation

Leave one-out validation

### KNN

Discrete-valued target function

Hamming distance for nominal and binary attributes

Weighted similarity measure

Distance-weighted nearest neighbour algorithm

Real-valued target function

### **Bayesian Learning**

Bayesian Classification
Naive Bayes Classification
Gaussian Naive Bayes Classification
Zero-Frequency problem
Laplace smoothing

- Sentiment Analysis using multinomial and bernoulli Naive Bayes
   Multinomial Naive Bayes
   Bernoulli Naive Bayes
   Sentiment analysis using bernoulli
- Multinomial Naïve Bayes Classifier

https://www.youtube.com/watch?v=IFJbZ6LVxN8&t=0s https://www.youtube.com/watch?v=3l8oX3OUL6l&t=927s https://www.youtube.com/watch?v=yRzlyWVEaCQ

Gold (Probability vs Likelihood)
https://www.youtube.com/watch?v=QBFVcBXRzu4

Multinomial and Bernoulli Naïve Bayes Classifier

https://www.youtube.com/watch?v=mqYa0LaA9WI https://www.youtube.com/watch?v=4\_OaKSWsJn0 https://www.youtube.com/watch?v=OAjDoFbq5Nw https://www.youtube.com/watch?v=IvTCdrx1SHQ

# Discretization / Binning Unsupervised Equal Width Equal Frequency K - Means Binning Encoding Numerical Columns Binarization Binarization Custom Decision Tree Binning

# **Feature Scaling**

https://www.youtube.com/watch?v=sxEqtjLC0aM https://www.youtube.com/watch?v=bqhQ2LWBheQ

# Adaboosting

- General
- SEMME

https://www.youtube.com/watch?v=avs14cAFyHE&list=PLgaemU2xZITieGRRTAdDIHOgxr-bs6pfr&index=8

https://www.youtube.com/watch?v=LVStXzGpA7Y&list=PLgaemU2xZlTieGRRTAdDIHOgxr-bs6pfr&index=9

https://www.youtube.com/watch?v=tPeRalG7gYY&list=PLgaemU2xZITieGRRTAdDIHOgxr-bs6p fr&index=10

https://www.youtube.com/watch?v=nPzW-AmPSLs&list=PLgaemU2xZITieGRRTAdDIHOgxr-s6p fr&index=11

https://www.youtube.com/watch?v=sFKnP0iP0K0&t=37s

https://www.youtube.com/watch?v=RT0t9a3Xnfw&t=930s

https://www.youtube.com/watch?v=a20TaKNsriE

https://www.youtube.com/watch?v=JmXnztjULnQ

https://www.youtube.com/watch?v=EKatfc6W1DU

### K Mean

### K Mean ++

https://www.youtube.com/watch?v=w5fjvhPATPY&list=PLgaemU2xZITisMjcQUvU8UzOpK4QXcUq-&index=44&pp=iAQB

https://www.youtube.com/watch?v=hToqjr5Kx4Q&list=PLgaemU2xZlTisMjcQUvU8UzOpK4QXcUq-&index=45&pp=iAQB

https://www.youtube.com/watch?v=ga3sofscV1E&list=PLgaemU2xZITisMjcQUvU8UzOpK4QXcUq-&index=46&pp=iAQB

https://www.youtube.com/watch?v=6X15aLmMCcg&list=PLgaemU2xZlTisMjcQUvU8UzOpK4QXcUg-&index=47&pp=iAQB

https://www.voutube.com/watch?v=4gJWhvFQb9g

https://www.youtube.com/watch?v=HatwtJSsj5Q&t=324s

## **Hierarchical Clustering (Agglomerative)**

https://www.youtube.com/watch?v=Ka5i9TVUT-E&t=1941s&pp=ygUgY2FtcHVzIHggaGllcmFyY2hpY2FsIGNsdXN0ZXJpbmc%3D

https://www.youtube.com/watch?v=QXOkPvFM6NU&t=693s

https://www.youtube.com/watch?v=RdT7bhm1M3E

# **OPTICS and DBSCAN**

https://www.youtube.com/watch?v=CV0mWaHOTA8&t=4s https://www.atlantbh.com/clustering-algorithms-dbscan-vs-optics/

# **Model Evaluation with Confusion Matrix and Classification Report**

https://app.myeducator.com/reader/web/1421a/9/wa1y4/ https://pub.towardsai.net/multi-class-model-evaluation-with-confusion-matrix-and-classification-report-c92a74d5e908

**Linear and DT Regression**