List of machine learning concepts

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(Redirected from List of machine learning algorithms)

This list is incomplete; you can help by expanding it.

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Supervised learning [edit]

- AODE
- Artificial neural network
  - Backpropagation
  - Autoencoders
  - Hopfield networks
  - Boltzmann machines
  - Restricted Boltzmann Machines
  - Spiking neural networks
- Bayesian statistics
  - Bayesian network
  - Bayesian knowledge base
- Case-based reasoning
- Gaussian process regression
- Gene expression programming
- Group method of data handling (GMDH)
- Inductive logic programming
- Instance-based learning
- Lazy learning
- Learning Automata
- Learning Vector Quantization
- Logistic Model Tree
- Minimum message length (decision trees, decision graphs, etc.)
  - Nearest Neighbor Algorithm
  - Analogical modeling
- Probably approximately correct learning (PAC) learning
- Ripple down rules, a knowledge acquisition methodology
- Symbolic machine learning algorithms
- Support vector machines
- Random Forests
- Ensembles of classifiers
  - Bootstrap aggregating (bagging)
  - Boosting (meta-algorithm)

- Ordinal classification
- Information fuzzy networks (IFN)
- Conditional Random Field
- ANOVA
- Linear classifiers
  - Fisher's linear discriminant
  - Logistic regression
  - Multinomial logistic regression
  - Naive Bayes classifier
  - Perceptron
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- Boosting
- Decision trees
  - C4.5
  - Random forests
  - ID3
  - CART
  - SLIQ
  - SPRINT
- Bayesian networks
  - Naive Bayes
- Hidden Markov models

Unsupervised learning [edit]

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- Vector Quantization
- Generative topographic map
- Information bottleneck method

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- Self-organizing map

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- Apriori algorithm
- Eclat algorithm
- FP-growth algorithm

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- Single-linkage clustering
- Conceptual clustering

Cluster analysis [edit]

- K-means algorithm
- Fuzzy clustering
- DBSCAN
- OPTICS algorithm

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- Local Outlier Factor

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This section is empty. You can help by adding to it. *(February 2015)*

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- Temporal difference learning
- Q-learning
- Learning Automata
- SARSA

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- Deep belief networks
- Deep Boltzmann machines
- Deep Convolutional neural networks
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- Data Pre-processing
- List of artificial intelligence projects

Categories: Machine learning algorithms | Artificial intelligence | Data mining