## It's a jungle out there

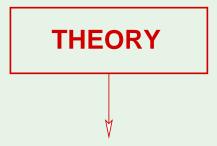
stochastic gradient descent semi-supervised learning overfitting Q learning **SVM Gaussian processes** deterministic noise data snooping distribution-free learning curves linear regression **VC** dimension collaborative filtering mixture of expe sampling bias nonlinear transformation neural networks decision trees no free training versus testing RBF noisy targets Bayesian prior active learning linear models bias-variance tradeoff weak learners ordinal regression logistic regression data contamination cross validation hidden Markov mo ensemble learning types of learning perceptrons kernel methods error measures graphical models ploration versus exploitation soft-order constraint is learning feasible? Boltzmann mach weight decay clustering

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regularization

Occam's razor

## The map

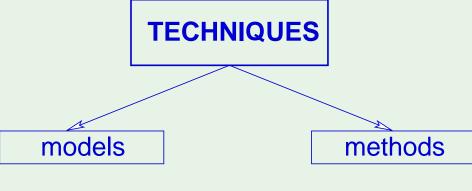


VC

bias-variance

complexity

bayesian



linear

neural networks

SVM

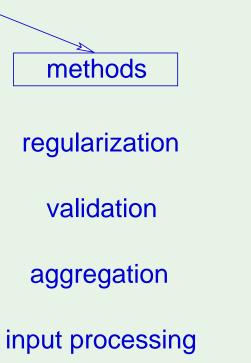
nearest neighbors

**RBF** 

gaussian processes

SVD

graphical models





supervised

unsupervised

reinforcement

active

online

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