Machine Learning For Jet Tagging

HEP Algorithms

Traditional NNs

Deep-learned Top Tagging with a Lorentz Layer

Deep-learning Top Taggers or The End of QCD?

Less Supervised Algorithms

Deep Learning Jet Substructure from Two-Particle Correlation

Uncovering latent jet substructure

Graph NNs

Qjets: A Non-Deterministic Approach to Tree-Based Jet Substructure

Normalizing Flows

Testing the boundaries: Normalizing Flows for higher dimensional data sets

Reviews

Jet substructure at the Large Hadron Collider: A review of recent advances in theory and machine learning

- start at page 42
  A Living Review of Machine Learning for Particle Physics

Markov Chains

Chapter 15: Probabilistic Reasoning Over Time

- features Markov chains

Structure/Dynamic ML

Dynamic Network Models for Forecasting
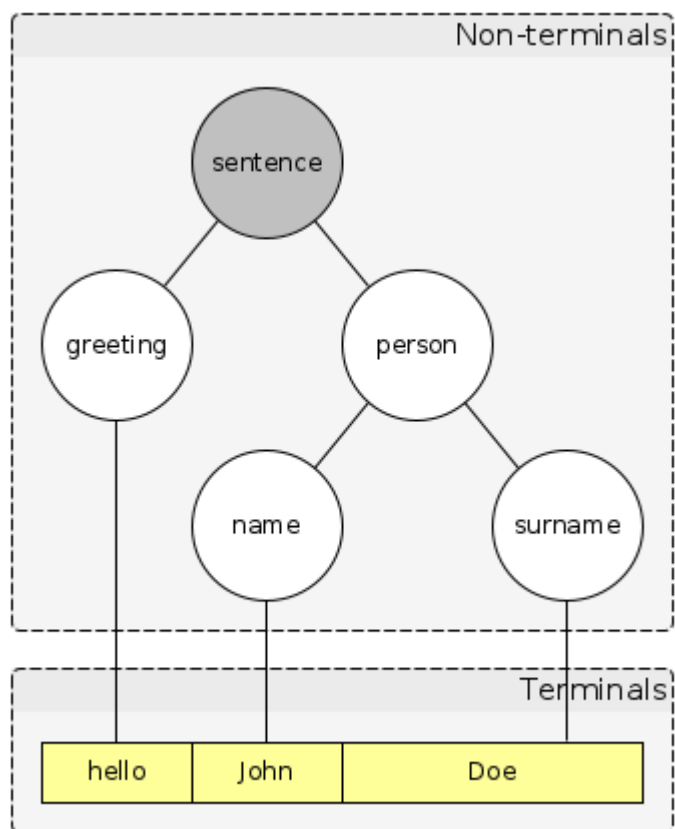
Structured machine learning: the next ten years

Bayesian Networks

- overview of Bayesian networks in Nature

Notes

- hidden markov chains?
- temporal evolution of probability distributions estimated with universal density estimator
  - normalizing flows
  - splines
- Terminal and non-terminal labels

  - terminal labels are the leaves of the semantics branch (they terminate the topics)