Learning,

-Learning MRF – Good Jupiter Notebook

-Learning CRF

Inference –

1. Variational inference / Variational EM

MAP –

* Simulated annealing
* ILP -> branch and bound -> optimization

Bayesian Learning and Inference -

1. Conjugate priors.
2. BNNs

Belief Propagation -> Trees / Exact inference.

Belief Propagation vs Loopy Belief Propagation

Information Theory

Sampling

Exponential Families

Psuedo likelihood -> MRF training

CRF – LCCRF (linear chain crf) -- HMM but MRF,

GMM –

Meta Networks

Advanced Variational inference

LDA code:

Week 1-2

-LDA