Learning Algorithms, Project 2

Mohsen Malmir, Erfan Sayyari

February 11, 2014

- 1 Abstract
- 2 Introduction
- 3 Design and Analysis of Algorithm
- 3.1 The general log-linear model
- 3.2 Feature functions
- 3.2.1 Part of Speech tagging
- 3.3 Conditional random fields
- 3.4 The Collins perceptron
- 3.5 Contrastive divergence
- 3.5.1 Gibbs sampling
- 4 Design of Experiments
- 4.1 Initialization
- 4.2 Preprocessing
- 4.3 Performance Measure
- 5 Results of Experiments
- 5.1 Collins perceptron
- 5.2 Gibbs sampling
- 6 Findings and Lessons Learned
- 6.1 Numerical Issues and Preprocessing
- 6.2 Overfitting
- 6.3 Model Selection
- 6.4 Future works