

CSCI 5832 Spring 2004 Quiz 1

Name: _____

On my honor, as a University of Colorado student, I have neither given nor received unauthorized assistance on this work. _____

1. True or False: A finite state automaton can be used to characterize a formal language that consists of an infinite number of strings. **(5 Points)**
2. The plural of potato is potatoes. Describe the general technique for using finite-state machines for morphological analysis that is suggested by this and other related facts. **(10 Points)**
3. Discuss an N-gram solution to the problem of correcting real-word spelling errors. **(10 Points)**
4. True or False: When applied to the problem of smoothing bigrams, the Witten-Bell method redistributes part of the probability mass from the non-zero counts to the zero-counts in a manner that is conditioned on the bigram prefixes. **(5 Points)**