

Final Review

Linguistics 384, section 3 (Martin-Lozano)

For the Final Exam on Tuesday December the 5th, 3:30-5:18pm, CC 345

1 Topics to be covered

1. Writer's Aids
2. Machine Translation

2 Format of the exam

You will have the entire 1:48 (3:30-5:18).

1. Term Matching: (see below)
2. Calculations/Short Answers:
 - Minimum Edit Distance
 - Venn Diagrams
 - Text Alignment
 - Bag of Words Method
 - Context-free grammars
 - Syntactic Trees
 - Transformer Systems
 - Direct Transfer Systems
 - Interlinguas

3 Terms to know

3.1 Writers' Aids

- | | | |
|----------------|------------------------|-------------------|
| – productivity | – Spoonerism | correctors |
| – inflection | – word recognition | – phonetic errors |
| – tokenization | – interactive spelling | – run-on errors |
| – detection | checkers | – split errors |
| – correction | – automatic spelling | – isolated words |

- (words in) context
- nonword error detection
- isolated-word error correction
- context-dependent word correction
- dictionary lookup
- dictionary construction
- insertion
- deletion
- substitution
- transposition
- single-error misspelling
- multi-error misspelling
- semantics
- array
- positional bigram array
- nonpositional bigram array
- domain-specificity
- minimum edit distance
- graph
- acyclic graph
- transition probabilities
- confusion probabilities
- local syntactic errors
- long-distance syntactic errors
- syntax
- linear order
- constituents
- syntactic tree
- category
- lexical category
- morphology
- function word
- open class
- closed class
- phrase structure rule
- generative
- structurally ambiguous
- hierarchical
- recursive
- infinite
- context-free grammar
- parsing
- local syntactic errors
- long-distance syntactic errors

3.2 Machine Translation

- translation
- machine translation
- (lexical) ambiguity
- structural ambiguity
- source language
- target language
- hyponym
- hypernym
- synonym
- interlingua
- dictionary
- lexicon
- lexical gap
- light verb
- idiom
- reversibility
- transformer architecture
- direct transfer
- transfer component
- comparative grammar
- robustness
- text alignment
- sentence alignment
- word alignment
- machine learning
- training data
- bag of words
- underlying representation
- intelligibility
- accuracy
- error analysis
- test suite
- taboo words