Title: Semantic analysis (machine learning)
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Linguistic
Logical
Computational
Lexical Lexis Lexicology
Lexis
Lexicology
Statistical
Structural
Analysis
Compositionality
Context Prototype theory Force dynamics
Prototype theory
Force dynamics
Semantic feature
Semantic gap
Theory of descriptions
Latent
Computational
Machine learning
Desktop
File system
Matching
Parsing
Querying web wiki
web
wiki
Similarity
Action
Algebraic
Axiomatic
Categorical

Concurrency

Denotational

Game

Operational

Predicate transformational

Abstract interpretation

Abstract semantic graph

Language

Linguistics

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In machine learning , semantic analysis of a text corpus is the task of building structures that approximate concepts from a large set of documents. It generally does not involve prior semantic understanding of the documents.

Semantic analysis strategies include:

Metalanguages based on first-order logic , which can analyze the speech of humans. [1] : 93-

Understanding the semantics of a text is symbol grounding : if language is grounded, it is equal to recognizing a machine-readable meaning. For the restricted domain of spatial analysis, a computer-based language understanding system was demonstrated. [2] : 123

Latent semantic analysis (LSA), a class of techniques where documents are represented as vectors in a term space. A prominent example is probabilistic latent semantic analysis (PLSA).

Latent Dirichlet allocation , which involves attributing document terms to topics.

n-grams and hidden Markov models , which work by representing the term stream as a Markov chain , in which each term is derived from preceding terms.

See also

Explicit semantic analysis

Information extraction

Semantic similarity

Stochastic semantic analysis

Ontology learning

References

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AI-complete

Bag-of-words

n -gram Bigram Trigram

Bigram

Trigram

Computational linguistics
Natural language understanding
Stop words
Text processing
Argument mining
Collocation extraction
Concept mining
Coreference resolution
Deep linguistic processing
Distant reading
Information extraction
Named-entity recognition
Ontology learning
Parsing Semantic parsing Syntactic parsing
Semantic parsing
Syntactic parsing
Part-of-speech tagging
Semantic analysis
Semantic role labeling
Semantic decomposition
Semantic similarity
Sentiment analysis
Terminology extraction
Text mining
Textual entailment
Truecasing
Word-sense disambiguation
Word-sense induction
Compound-term processing
Lemmatisation
Lexical analysis
Text chunking
Stemming
Sentence segmentation
Word segmentation
Multi-document summarization
Sentence extraction
Text simplification

Computer-assisted

Example-based

Rule-based

Statistical

Transfer-based

Neural

BERT

Document-term matrix

Explicit semantic analysis

fastText

GloVe

Language model (large)

Latent semantic analysis

Seq2seq

Word embedding

Word2vec

Corpus linguistics

Lexical resource

Linguistic Linked Open Data

Machine-readable dictionary

Parallel text

PropBank

Semantic network

Simple Knowledge Organization System

Speech corpus

Text corpus

Thesaurus (information retrieval)

Treebank

Universal Dependencies

BabelNet

Bank of English

DBpedia

FrameNet

Google Ngram Viewer

UBY

WordNet

Wikidata

Speech recognition

Speech segmentation

Speech synthesis

Natural language generation

Optical character recognition

Document classification

Latent Dirichlet allocation

Pachinko allocation

Automated essay scoring

Concordancer

Grammar checker

Predictive text

Pronunciation assessment

Spell checker

Chatbot

Interactive fiction

Question answering

Virtual assistant

Voice user interface

Formal semantics

Hallucination

Natural Language Toolkit

spaCy

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