COReS: Content base Ontology for Research Paper Similarity

IRI:
http://purl.org/net/COReS

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Other visualisation:
Ontology source

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Introduction

COReS stands for Content based Ontology for Research paper Similarity. This Ontology provides classifications for content based similarity techniques. There are two layers in the COReS.

One of the layers represent a a class hierarchy for different content based similarity techniques.

Second layer represents the class hierarchy of pair-wise content based similarity measures computed using techniques of first layer.

Classes

average k l divergence bibliographic coupling sim citation based similarity
citation context based sim citation count based sim citation graph based sim

cocitation analysis sim content based similarity cosine similarity dice coefficient direct citation count sim dissimilarity distance based similarity edit distance euclidean similarity hellsinger similiarity hybrid content based similarity information radius jaccard similarity k l divergence l cosine s imilarity latent diritchel allocation lexical similarity manhatton norm matching coefficient non content based similarity normalized pointwise mutual info overlap coefficient p w average k l divergence sim measure
p w bibliographic coupling based sim measure p w citation based sim measure
p w citation context based sim measure p w citation count based sim measure
p w citation graph based sim measure p w cocitation analysis based sim measure
p w cosine sim measure p w dice coefficient s im measure
p w direct citation count based sim measure p w edit distance sim measure
p w information radius based sim measure p w jaccard sim measure
p w l cosine sim measure p w latent diritchel allocation sim measure
p w lexical based sim measure p w manhatton norm sim measure
p w matching coefficient sim measure p w normalized p m i sim measure
p w overlapping coefficient sim measure
p w pearson correlation coefficient sim measure
p w pointwise mutual information sim measure p w probabilistic sim measure
p w structural sim measure p w tree edit distance sim measure
p w vector space based sim measure p w visual sim measure
p w x m l based sim measure pair wise content based similarity measures
pearson correlation coefficient similarity pointwise mutual information
probabilistic similarity relatedness similarity structural similarity
tree edit distance vector space based similarity x m l based similarity

average k l divergence[C]

back to ToC or Class ToC

IRI: http://purl.org/net/CORes#Average_KL_divergence

A probabilistic similarity technique which is symmetric

has super-classes

k l divergence[C]

bibliographic coupling sim[C]

back to ToC or Class ToC

IRI: http://purl.org/net/CORes#Bibliographic_coupling_sim

This class represents bibliographic coupling based similarity technique

has super-classes

citation count based sim[C]

citation based similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/CORes#Citation_based_similarity

This class represents the similarity techniques which use citation information of research papers to compute similarity between them

has super-classes

content based similarity[C]

has sub-classes

citation context based sim[C], citation count based sim[C], citation graph based sim[C]

is disjoint with

probabilistic similarity[C], vector space based similarity[C]

citation context based sim[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Citation_context_based_sim

This class represents such similarity techniques which use citation contexts in research papers to compute similarity

has super-classes

citation based similarity[C]

citation count based sim[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Citation_count_based_sim

This class represents citation count based similarity technique to compute relatedness between research papers

has super-classes

citation based similarity[C]

has sub-classes

bibliographic coupling sim[C], cocitation analysis sim[C], direct citation count sim[C]

citation graph based sim[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Citation_graph_based_sim

This class represents such similarity techniques which citation graphs of research papers to compute similarity

has super-classes

citation based similarity[C]

cocitation analysis sim[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Cocitation_analysis_sim

This class represents a similarity technique based on co-citation analysis

has super-classes

citation count based sim[c]

content based similarity[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Content_based_similarity

This class represents the concept of such similarity measures which use contents of research articles to compute relatedness between them

has super-classes

similarity[c]

has sub-classes

citation based similarity[c], lexical similarity[c], probabilistic similarity[c], structural similarity[c], vector space based similarity[c]

is in domain of

generates[op]

cosine similarity[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Cosine_Similarity

This class represents the cosine similarity which is computed between vectors of research documents

has super-classes

vector space based similarity[c]

has sub-classes

l cosine s imilarity[c]

dice coefficient[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Dice_Coefficient

A VSM technique for Binary Vectors

has super-classes

vector space based similarity[c]

direct citation count sim[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Direct_citation_count_sim

This class represents similarity technique based on direct citation count for research papers

has super-classes

citation count based sim[C]

dissimilarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Dissimilarity

This class represents the concept of dissimilarity measure which can be used to compute relatedness between researcha articles

has super-classes

relatedness[C]

distance based similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Distance_Based_Similarity

Set of techniques using distance between vectors of research documents

has super-classes

vector space based similarity[C]

has sub-classes

euclidean similarity[C], hellsinger similiarity[C]

edit distance[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Edit_distance

This class represents edit distance based similarity measuring technique for finding similrity between research papers

has super-classes

lexical similarity[C]

euclidean similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Euclidean_Similarity

has super-classes

distance based similarity[C]

hellsinger similiarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Hellsinger_Similiarity

has super-classes

distance based similarity[C]

hybrid content based similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Hybrid_content_based_similarity

This class represents the combination of different content based similarity techniques, when used in a combined manner

has super-classes

similarity[C]

information radius[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Information_Radius

A probabilistic similarity called Information Radius, providing better results than KL_Divergence

has super-classes

probabilistic similarity[C]

jaccard similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Jaccard_Similarity

Another VSM technique

has super-classes

vector space based similarity[C]

k l divergence[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#KL_Divergence

A probabilistic similarity technique which is not symmetric

has super-classes

probabilistic similarity[C]

has sub-classes

average k l divergence[C]

l cosine s imilarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#L_Cosine_SImilarity

A variation of cosine similarity

has super-classes

cosine similarity[C]

latent diritchel allocation[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Latent_Diritchel_Allocation

A probabilistic similarity using different topic models of research papers such as ACM and DMOZ classifications

has super-classes

probabilistic similarity[C]

lexical similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Lexical_similarity

This technique focus on lexical (string based) contents of research papers to compute similarity between them

has super-classes

content based similarity[C]

has sub-classes

edit distance[C], tree edit distance[C]

manhatton norm[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Manhatton_Norm

A probabilistic similarity measure called Manhatton Norm

has super-classes

probabilistic similarity[C]

matching coefficient[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Matching_Coefficient

A VSM technique for Binary Vectors

has super-classes

vector space based similarity[C]

non content based similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Non_Content_based_similarity

This class represents such similarity techniques which use such entities which do nto use contents of research papers such as collaborative filtering, item centric measures etc.

has super-classes

similarity[C]

normalized pointwise mutual info[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Normalized_Pointwise_Mutual_Info

A category of Pointwise Mututal Information

has super-classes

pointwise mutual information[C]

overlap coefficient[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Overlap_Coefficient

A VSM technique for Binary Vectors

has super-classes

vector space based similarity[C]

p w average k l divergence sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Average_KL_Divergence_Sim_Measure

has super-classes

p w probabilistic sim measure[C]

p w bibliographic coupling based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Bibliographic_Coupling_based_Sim_Measure

has super-classes

p w citation count based sim measure[C]

p w citation based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Citation_based_sim_measure

has super-classes

pair wise content based similarity measures[C]

has sub-classes

p w citation context based sim measure[C], p w citation count based sim measure[C], p w citation graph based sim measure[C]

p w citation context based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Citation_Context_based_Sim_Measure

has super-classes

p w citation based sim measure[C]

p w citation count based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Citation_Count_based_Sim_Measure

has super-classes

p w citation based sim measure[C]

has sub-classes

p w bibliographic coupling based sim measure[C], p w cocitation analysis based sim measure[C], p w direct citation count based sim measure[C]

p w citation graph based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Citation_Graph_based_Sim_Measure

has super-classes

p w citation based sim measure[C]

p w cocitation analysis based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Cocitation_Analysis_based_Sim_Measure

has super-classes

p w citation count based sim measure[C]

p w cosine sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Cosine_Sim_Measure

has super-classes

p w vector space based sim measure[C]

has sub-classes

p w l cosine sim measure[C]

p w dice coefficient s im measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Dice_Coefficient_SIm_Measure

has super-classes

p w vector space based sim measure[C]

p w direct citation count based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Direct_Citation_Count_based_Sim_Measure

has super-classes

p w citation count based sim measure[C]

p w edit distance sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Edit_Distance_Sim_Measure

has super-classes

p w lexical based sim measure[C]

p w information radius based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Information_Radius_based_Sim_Measure

has super-classes

p w probabilistic sim measure[C]

p w jaccard sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Jaccard_Sim_Measure

has super-classes

p w vector space based sim measure[C]

p w l cosine sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_L_Cosine_Sim_Measure

has super-classes
p w cosine sim measure[C]

p w latent diritchel allocation sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Latent_Diritchel_Allocation_Sim_Measure

has super-classes
p w probabilistic sim measure[C]

p w lexical based sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Lexical_Based_Sim_Measure

has super-classes
pair wise content based similarity measures[C]

has sub-classes
p w edit distance sim measure[C], p w tree edit distance sim measure[C]

p w manhatton norm sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Manhatton_Norm_Sim_Measure

has super-classes
p w probabilistic sim measure[C]

p w matching coefficient sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Matching_Coefficient_Sim_Measure

has super-classes
p w vector space based sim measure[C]

p w normalized p m i sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Normalized_PMI_Sim_Measure

has super-classes
p w pointwise mutual information sim measure[C]

p w overlapping coefficient sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Overlapping_Coefficient_Sim_Measure

has super-classes

p w vector space based sim measure[C]

p w pearson correlation coefficient sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Pearson_Correlation_Coefficient_Sim_Measure

has super-classes

p w vector space based sim measure[C]

p w pointwise mutual information sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Pointwise_Mutual_Information_Sim_Measure

has super-classes

p w probabilistic sim measure[C]

has sub-classes

p w normalized p m i sim measure[C]

p w probabilistic sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Probabilistic_Sim_Measure

has super-classes

pair wise content based similarity measures[C]

has sub-classes

p w average k l divergence sim measure[C], p w information radius based sim measure[C], p w latent diritchel allocation sim measure[C], p w manhatton norm sim measure[C], p w pointwise mutual information sim measure[C]

p w structural sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Structural_Sim_Measure

has super-classes

pair wise content based similarity measures[C]

has sub-classes

p w visual sim measure[C], p w x m l based sim measure[C]

p w tree edit distance sim measure[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Tree_Edit_Distance_Sim_Measure

has super-classes
p w lexical based sim measure[c]

p w vector space based sim measure[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Vector_Space_Based_Sim_Measure

has super-classes
pair wise content based similarity measures[c]
has sub-classes
p w cosine sim measure[c], p w dice coefficient s im measure[c], p w jaccard sim measure[c], p w matching coefficient sim measure[c], p w overlapping coefficient sim measure[c], p w pearson correlation coefficient sim measure[c]

p w visual sim measure[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_Visual_Sim_Measure

has super-classes
p w structural sim measure[c]

p w x m l based sim measure[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#PW_XML_based_sim_measure

has super-classes
p w structural sim measure[c]

pair wise content based similarity measures[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Pair-wise_content_based_similarity_measures

has super-classes
similarity[c]
has sub-classes
p w citation based sim measure[c], p w lexical based sim measure[c], p w probabilistic sim measure[c], p w structural sim measure[c], p w vector space based sim measure[c]
is in range of
generates[op]

pearson correlation coefficient similarity[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Pearson_Correlation_Coefficient_Similarity

has super-classes

vector space based similarity[C]

pointwise mutual information[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Pointwise_Mutual_Information

Uses Co-occurrene based inofmration about set of terms in probability distribution lists to find similar papers

has super-classes

probabilistic similarity[C]

has sub-classes

normalized pointwise mutual info[C]

probabilistic similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Probabilistic_Similarity

This class represents a set of techniques which use probability distribution of words of research papers to find similarity between them

has super-classes

content based similarity[C]

has sub-classes

information radius[C], k l divergence[C], latent diritchel allocation[C], manhatton norm[C], pointwise mutual information[C]

is disjoint with

citation based similarity[C], vector space based similarity[C]

relatedness[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Relatedness

This class represents the relatedness measures which can be used to find relatedness between research articles

has super-classes

thing[C]

has sub-classes

dissimilarity[C], similarity[C]

similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Similarity

This class represents the concept of similarity measures used to compute relatedness between research articles

has super-classes

relatedness[C]

has sub-classes

content based similarity[C], hybrid content based similarity[C], non content based similarity[C], pair wise content based similarity measures[C]

structural similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Structural_similarity

This class represents such similarity techniques which focus on document structure of a research paper, such as XML representation of document structure

has super-classes

content based similarity[C]

has sub-classes

x m l based similarity[C]

tree edit distance[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Tree_edit_distance

This class represents Tree Edit distance based similarity technique

has super-classes

lexical similarity[C]

vector space based similarity[C]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#Vector_Space_Based_Similarity

A class representing thos similarity techniques which use Vector Space model of research documents to compute similarity between them

has super-classes

content based similarity[C]

has sub-classes

cosine similarity[C], dice coefficient[C], distance based similarity[C], jaccard similarity[C], matching coefficient[C], overlap coefficient[C], pearson correlation coefficient similarity[C]

is disjoint with

citation based similarity[C], probabilistic similarity[C]

x m l based similarity[c]

back to ToC or Class ToC

IRI: http://purl.org/net/COReS#XML_based_similarity

This class represents such similarity techniques which specifically focus on XML based structure of a research paper

has super-classes

structural similarity[c]

Object Properties

generates

generates[op]

back to ToC or Object Property ToC

IRI: http://purl.org/net/COReS#Generates

has domain

content based similarity[c]

has range

pair wise content based similarity measures[c]

Annotation Properties

c n pl c n sg contains p n sg t v pl t v sg t v vbg

c n pl[ap]

back to ToC or Annotation Property ToC

IRI: http://attempto.ifi.uzh.ch/ace_lexicon#CN_pl

c n sg[ap]

back to ToC or Annotation Property ToC

IRI: http://attempto.ifi.uzh.ch/ace_lexicon#CN_sg

contains[ap]

back to ToC or Annotation Property ToC

IRI: http://purl.org/net/COReS#contains

p n sg[ap]

back to ToC or Annotation Property ToC

IRI: http://attempto.ifi.uzh.ch/ace_lexicon#PN_sg

t v pl[ap]

back to ToC or Annotation Property ToC

IRI: http://attempto.ifi.uzh.ch/ace_lexicon#TV_pl

t v sg[ap]

back to ToC or Annotation Property ToC

IRI: http://attempto.ifi.uzh.ch/ace_lexicon#TV_sg

t v vbg[ap]

back to ToC or Annotation Property ToC

IRI: http://attempto.ifi.uzh.ch/ace_lexicon#TV_vbg

Namespace Declarations

back to ToC

default namespace
http://purl.org/net/CORes#

CORes
http://purl.org/net/CORes#

ace_lexicon
http://attempto.ifi.uzh.ch/ace_lexicon#

dc
http://purl.org/dc/elements/1.1/

fabio
http://purl.org/spar/fabio/

net
http://purl.org/net/

owl
http://www.w3.org/2002/07/owl#

rdf
http://www.w3.org/1999/02/22-rdf-syntax-ns#

rdfs
http://www.w3.org/2000/01/rdf-schema#

xsd
http://www.w3.org/2001/XMLSchema#