



WISER

Un motore di ricerca semantico per «expertise»

Paolo Ferragina, Università di Pisa



ASSOCIAZIONE
ITALIANA
PER LA RICERCA
INDUSTRIALE



CAMERA DI
COMMERCIO
MILANO
MONZABRIANZA
LODI



OPEN SCIENCE & INNOVATION

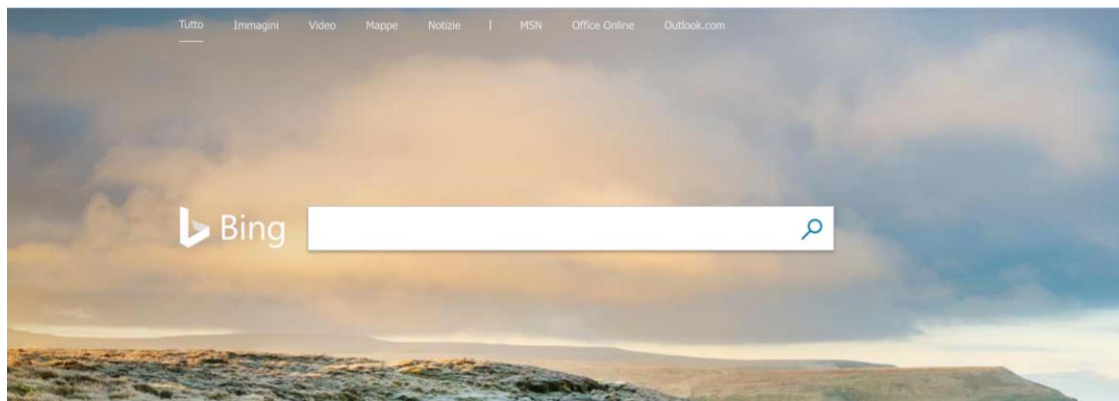
| 25 febbraio 2019 – Palazzo Turati - Milano |





Cerca con Google

Mi sento fortunato



Il nostro obiettivo

Come possiamo rendere più efficiente ed efficace la ricerca di «esperti accademici» da parte di colleghi, innovatori e aziende ?

	Web	Accademia
archivio	Documenti	Esperti
interrogazione	Parole Chiave	Argomenti, Ricercatori, Dipartimenti



SciVal

Scopus ↗

Welcome to SciVal

SciVal offers quick, easy access to research performance of more than 12,100 research institutions and their associated researchers from 230 nations worldwide.

Don't have access? [Request a consultation](#) ↗

Find

Find collaborators to spur innovative solutions to complex problems.

Demonstrate

Demonstrate my impact for promotion and funding applications.

Discover

Discover relevant cross-disciplinary areas of research.





machine learning pisa



EN



Login



Dino Pedreschi



h-index: 44 | ***#Paper:*** 250 | ***#Citation:*** 8649

Professor

KDD Lab, University of Pisa

Follow | 2

Similar

Data Mining

Logic Program

Complex Network

Social Network

Knowledge Discovery

513 views



Floriana Esposito



h-index: 34 | ***#Paper:*** 474 | ***#Citation:*** 4811

Full Professor

University of Bari Dpt. Computer Science

Follow | 4

Similar

Machine Learning

Knowledge Bases

Knowledge Discovery

Data Mining

Knowledge Engineering

4042 views



Fosca Giannotti



h-index: 42 | ***#Paper:*** 252 | ***#Citation:*** 9467

senior researcher, Director

Istituto di Scienza e Tecnologie dell'Informazione, National Research Council of Italy (ISTI-CNR)

Follow | 4

Similar

Data Mining

Query Language

Data Analysis

Data Privacy

Movement Data

Natural Language Understanding

Facile per noi umani



Difficile per le macchine



?



?

?

... ciò diventerà ancora più difficile nei nuovi sistemi di «**Conversational AI**»



Siri

Natural Language Understanding

Tradizionalmente le machine hanno rappresentato il **testo** tramite *l'insieme delle parole* che lo compongono

Leonardo ha dipinto la Gioconda



Leonardo	dipinto	Gioconda
----------	---------	----------

Natural Language Understanding

Tradizionalmente le machine hanno rappresentato il **testo** tramite *l'insieme delle parole* che lo compongono

Leonardo ha dipinto la Gioconda



Leonardo	dipinto	Gioconda
----------	---------	----------

Natural Language Understanding

Tradizionalmente le machine hanno rappresentato il **testo** tramite *l'insieme delle parole* che lo compongono

Leonardo ha dipinto la Gioconda



Leonardo
DiCaprio



Leonardo
da Vinci




Leonardo
(città)




Leonardo
(Tartarughe)





Letteratura scientifica
2007



Google 2012

The Knowledge Graph
Learn more about one of the key breakthroughs behind the future of search.

See it in action
Discover answers to questions you never thought to ask, powered by the Knowledge Graph.

Leonardo di ser Piero da Vinci was an Italian Renaissance polymath: painter, sculptor, architect, musician, scientist, mathematician, engineer, inventor, anatomist, geologist, cartographer, botanist, ...
Read more on an wikipedia.org

Born: April 15, 1453, Anchores
Died: May 2, 1519, Clos Lucé
Buried: St. Florentin's Church
Inventions: Viola organista, Double hull
Parents: Caterina da Vinci, Piero da Vinci

Mona Lisa
The Last Supper
Virgin of the Rocks
Lady with an Ermine
The Battle of Anghiari



leonardo da vinci



All Images Videos News Books More Settings Tools

About 156,000,000 results (0.68 seconds)

Leonardo da Vinci - Wikipedia

https://en.wikipedia.org/wiki/Leonardo_da_Vinci

Leonardo di ser Piero da Vinci more commonly Leonardo da Vinci or simply Leonardo, was an Italian polymath of the Renaissance whose areas of interest ...

Works: Mona Lisa, The Last Supper, Salvator ... Known for: Art, science

Movement: High Renaissance

List of works by Leonardo da Vinci · Science and inventions · Portal:Leonardo da Vinci

Leonardo da Vinci - Wikipedia

https://it.wikipedia.org/wiki/Leonardo_da_Vinci · Translate this page

Leonardo di ser Piero da Vinci (Anchiano, 15 aprile 1452 – Amboise, 2 maggio 1519) è stato un inventore, artista e scienziato italiano. Uomo d'ingegno e ...

Codici di Leonardo da Vinci · Vita personale di Leonardo da Vinci · Uomo vitruviano

Top stories



Leonardo da Vinci's Geological Secrets Revealed By Forensic Science

Forbes · 1 day ago



I miti da sfatare su Leonardo da Vinci

Wired · 2 days ago



Leonardo da Vinci masterpieces to be displayed in Derby

Derbyshire Live · 2 days ago

→ More for leonardo da vinci

People also ask

What was Leonardo da Vinci's greatest achievement?

What is so great about da Vinci?

Who was Leonardo da Vinci apprenticed to?

Why was Leonardo da Vinci famous?

Feedback

Leonardo da Vinci - Paintings, Drawings, Quotes, Facts, & Biography

<https://www.leonardodavinci.net/>

Leonardo da Vinci was a true genius who graced this world with his presence from April 15, 1452 to May 2, 1519. He is among the most influential artists in ...



More images

Leonardo da Vinci

Polymath

Leonardo di ser Piero da Vinci, more commonly Leonardo da Vinci or simply Leonardo, was an Italian polymath of the Renaissance whose areas of interest included invention, drawing, painting, sculpting, ...
Wikipedia

Born: April 15, 1452, Anchiano

Died: May 2, 1519, Château du Clos Lucé, Amboise, France

On view: Louvre Museum, Royal Collection Trust, Uffizi Gallery, MORE

Periods: High Renaissance, Early renaissance, Renaissance, Italian Renaissance, Florentine painting

Known for: Art, science

Buried: Chapel of Saint-Hubert, Amboise, France

Quotes

View 7+ more

Simplicity is the ultimate sophistication.

Art is never finished, only abandoned.

When once you have tasted flight, you will forever walk the earth with your eyes turned skyward, for there you have been, and there you will always long to return.

Artworks

View 15+ more



Salvator Mundi
1500



Mona Lisa
1503



The Last Supper
1495



Lady with an Ermine
1489



Vitruvian Man

People also search for

View 15+ more



Nikola Tesla
Trending



Michelan...



Raphael



Vincent van Gogh



Pablo Picasso

A³Lab



Google
Faculty Research Awards

due edizioni: 2010 &
2013

Capire il testo mediante le sue «entità»

Leonardo *ha dipinto la* Gioconda





Documenti = Abstract di pubblicazioni



Topical clustering of search results

Full Text: [PDF](#)

see [source materials](#) below for [more options](#)

Authors: [Ugo Scaiella](#) [University of Pisa, Pisa, Italy](#)
[Paolo Ferragina](#) [University of Pisa, Pisa, Italy](#)
[Andrea Marino](#) [University of Florence, Florence, Italy](#)
[Massimiliano Ciaramita](#) [Google Research, Zürich, Switzerland](#)



2012 Article

[Bibliometrics](#)

- Citation Count: 26
- Downloads (cumulative): 923
- Downloads (12 Months): 11
- Downloads (6 Weeks): 0

Published in:



· Proceeding
[WSDM '12](#) Proceedings of the fifth ACM international conference on Web search and data mining
Pages 223-232

Seattle, Washington, USA — February 08 - 12, 2012

ACM New York, NY, USA ©2012

[table of contents](#) ISBN: 978-1-4503-0747-5 doi>[10.1145/2124295.2124324](#)



[Similar Patents and Articles](#) ▼

[Contact Us](#) | Switch to [single page view](#) (no tabs)

[Abstract](#) [Source Materials](#) [Authors](#) [References](#) [Cited By](#) [Index Terms](#) [Publication](#) [Reviews](#) [Comments](#) [Table of Contents](#)

Search results clustering (SRC) is a challenging algorithmic problem that requires grouping together the results returned by one or more search engines in topically coherent clusters, and labeling the clusters with meaningful phrases describing the topics of the results included in them.

In this paper we propose to solve SRC via an innovative approach that consists of modeling the problem as the *labeled clustering* of the nodes of a newly introduced *graph of topics*. The topics are Wikipedia-pages identified by means of recently proposed topic annotators [9, 11, 16, 20] applied to the search results, and the edges denote the relatedness among these topics computed by taking into account the linkage of the Wikipedia-graph.

We tackle this problem by designing a novel algorithm that exploits the spectral properties and the labels of that graph of topics. We show the superiority of our approach with respect to academic state-of-the-art work [6] and well-known commercial systems (CLUSTY and LINGO3G) by performing an extensive set of experiments on standard datasets and user studies via Amazon Mechanical Turk. We test several standard measures for evaluating the performance of all systems and show a relative improvement of up to 20%.

Tools and Resources

[Request Permissions](#)

TOC Service:
 [Email](#) [RSS](#)

[Save to Binder](#)

Export Formats:
[BibTeX](#) [EndNote](#) [ACM Ref](#)

Upcoming Conference:
[WSDM '19](#)

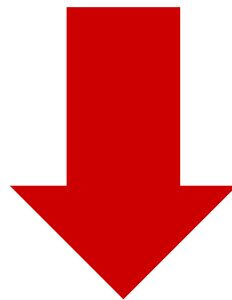
Share:

[Author Tags](#) ▼

Search results clustering (SRC) is a challenging **algorithmic** problem that requires grouping together the results returned by one or more search engines in topically coherent clusters, and labeling the clusters with meaningful phrases describing the topics of the results included in them.

In this paper we propose to solve SRC via an innovative approach that consists of modeling the **problem** as the *labeled clustering* of the nodes of a newly introduced *graph of topics*. The topics are **Wikipedia**-pages identified by means of recently proposed topic annotators [9, 11, 16, 20] applied to the **search results**, and the edges denote the relatedness among these topics computed by taking into account the linkage of the **Wikipedia**-graph.

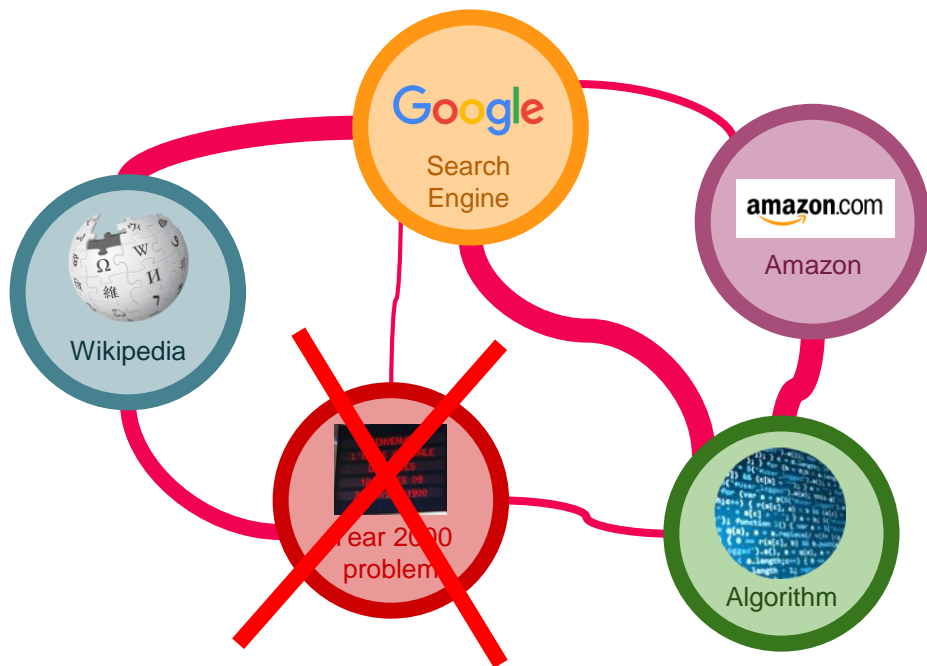
We tackle this **problem** by designing a novel **algorithm** that exploits the spectral properties and the labels of that graph of topics. We show the superiority of our approach with respect to academic state-of-the-art work [6] and well-known commercial systems (CLUSTY and LINGO3G) by performing an extensive set of experiments on standard datasets and user studies via **Amazon** Mechanical Turk. We test several standard measures for evaluating the performance of all systems and show a relative improvement of up to 20%.

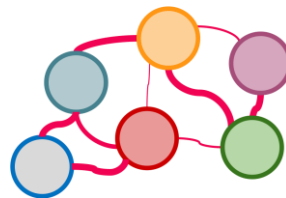
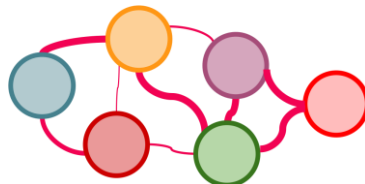
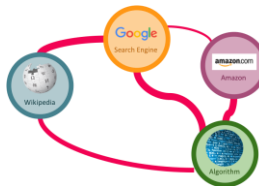


Search results clustering (SRC) is a challenging algorithmic problem that requires grouping together the results returned by one or more search engines in topically coherent clusters, and labeling the clusters with meaningful phrases describing the topics of the results included in them.

In this paper we propose to solve SRC via an innovative approach that consists of modeling the problem as the labeled clustering of the nodes of a newly introduced *graph of topics*. The topics are Wikipedia-pages identified by means of recently proposed topic annotators [9, 11, 16, 20] applied to the search results, and the edges denote the relatedness among these topics computed by taking into account the linkage of the Wikipedia-graph.

We tackle this problem by designing a novel algorithm that exploits the spectral properties and the labels of that graph of topics. We show the superiority of our approach with respect to academic state-of-the-art work [6] and well-known commercial systems (CLUSTY and LINGO3G) by performing an extensive set of experiments on standard datasets and user studies via Amazon Mechanical Turk. We test several standard measures for evaluating the performance of all systems and show a relative improvement of up to 20%.





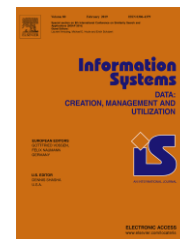


Search by Expertise

Search by Name

Search by Department

- ▷ ~1.5K autori
- ▷ ~65K documenti
- ▷ ~35K argomenti (topic)
- ▷ Adottato dall'Ufficio Trasferimento Tecnologico di UniPI





WISER
Wikipedia Expertise Ranking

machine learning



Search by Expertise

Search by Name

Search by Department

100 results in 1.513s

Alessandro Lenci

Professor

DIPARTIMENTO DI FILOLOGIA,
LETTERATURA E LINGUISTICA

Davide Bacciu








































































































































































































Researcher

DIPARTIMENTO DI INFORMATICA



Select the range of years to analyze.



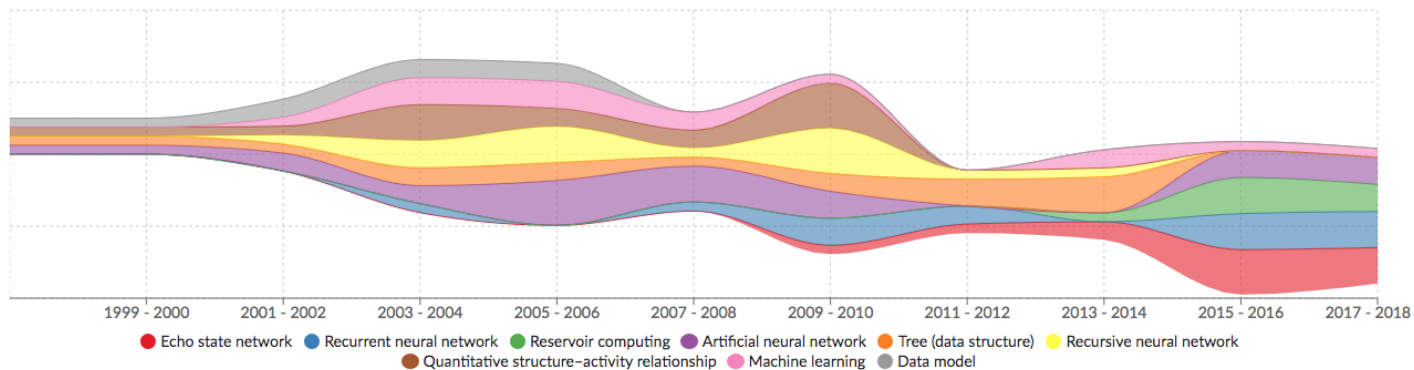
Ra...	Entity	Count	Doc. count	Years																	Wiser score 
				1998	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
1	Recurrent neural network	26	15																		
2	Artificial neural network	44	24																		
3	Tree (data structure)	24	17																		
4	Machine learning	16	14																		
5	Recursive neural network	16	16																		
6	Quantitative structure-activi...	30	16																		
7	Echo state network	14	13																		
8	Mathematical model	39	28																		
9	Prediction	19	17																		
10	Generative model	9	7																		
11	Group representation	22	14																		
12	Empiricism	15	15																		
13	Data model	8	8																		
14	Data set	20	14																		
15	Reservoir computing	8	8																		
Previous				Page		1		of 24				15 rows 				Next					

Select range of years to examine.

6

Select how many topics for each range

4





Search by Expertise

Search by Name

Search by Department



<http://wiser.d4science.org>



<http://acube.di.unipi.it>