

University of Connecticut OpenCommons@UConn

UConn Library Presentations

UConn Library

10-22-2018



Marisol Ramos University of Connecticut - Storrs, marisol.ramos@uconn.edu

Follow this and additional works at: https://opencommons.uconn.edu/libr_pres

Recommended Citation

Ramos, Marisol, "OA Week 2018" (2018). UConn Library Presentations. 51. https://opencommons.uconn.edu/libr_pres/51

Open Access Week!

UConn Library 2018

Supporting a Society where Research is Shared Freely

What is Open Access?

Open Access is the free, immediate, online availability of research articles coupled with the rights to use these articles fully in the digital environment. Open Access ensures that anyone can access and use these results to turn ideas into industries and breakthroughs into better lives.

Gold Vs. Green Open Access

Gold Open Access takes place in formally published scholarly journals and is available immediately. Sometimes there is a charge to authors.

Green Open Access takes place in archival repositories, often after a delay following formal publication el sewhere. Access is Free!

Federal Funders Requiring "Open Literature"



	plos.org	create account	sign in
Publish About	Browse	Search	Q
		adv	anced search

🔓 OPEN ACCESS 👔 PEER-REVIEWED

RESEARCH ARTICLE

Efficient Record Linkage Algorithms Using Complete Linkage Clustering

Abdullah-Al Mamun, Robert Aseltine, Sanguthevar Rajasekaran 🖬

Published: April 28, 2016 https://doi.org/10.1371/journal.pone.0154448

Article	Authors	Metrics	Comments	Related Content	Download I
¥					Print

Abstract

Abstract

Introduction Background and Significance Related Works Methods Results Discussion Conclusions Acknowledgments Author Contributions References

Data from different agencies share data of the same individuals. Linking these datasets to identify all the records belonging to the same individuals is a crucial and challenging problem, especially given the large volumes of data. A large number of available algorithms for record linkage are prone to either time inefficiency or low-accuracy in finding matches and nonmatches among the records. In this paper we propose efficient as well as reliable sequential and parallel algorithms for the record linkage problem employing hierarchical clustering methods. We employ complete linkage hierarchical clustering algorithms to address this problem. In addition to hierarchical clustering, we also use two other techniques: elimination of duplicate records and blocking. Our algorithms use sorting as a sub-routine to identify identical copies of records. We have tested our algorithms on datasets with millions of synthetic records. Experimental results show that our algorithms achieve nearly 100% accuracy. Parallel implementations achieve almost linear speedups. Time complexities of these algorithms do not exceed those of previous best-known algorithms. Our proposed algorithms outperform previous best-known algorithms in terms of accuracy consuming reasonable run times.

Reader Comments (0) Media Coverage (0) Figures Figures





19

Save

5,541

View

2

Citation

0

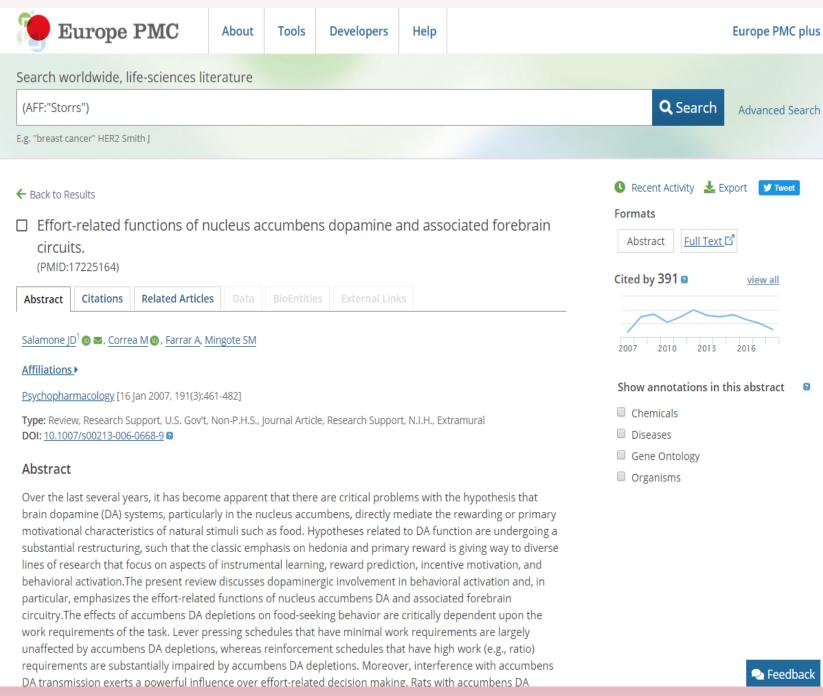
Share

PDF Share

the Collection >



Example of Gold Open Access via the journal *PLOS One*



Example of Green Open Access via PubMed Central repository

Why Open Access Matters?

- > Gives authors a worldwide audience without subscription barriers
- > Offers readers barrier-free access to information
- > Puts rich and poor on the same informational footing
- > Increases visibility of university's faculty and research
- > Makes publicly funded research available to the public
- > Helps authors retain copyright for their works
- > Increases scholarly citation rates
- > Allows better models and more collaborative research

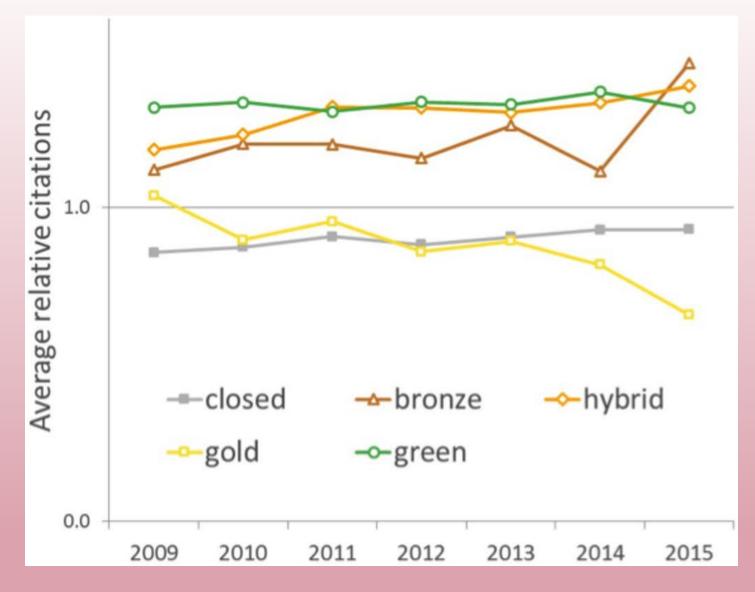
What Research say about OA?

At least 28% of the scholarly literature is OA (19M in total) and [...] this proportion is growing, driven particularly by growth in Gold and Hybrid.

The most recent year analyzed (2015) also has the highest percentage of OA (45%).

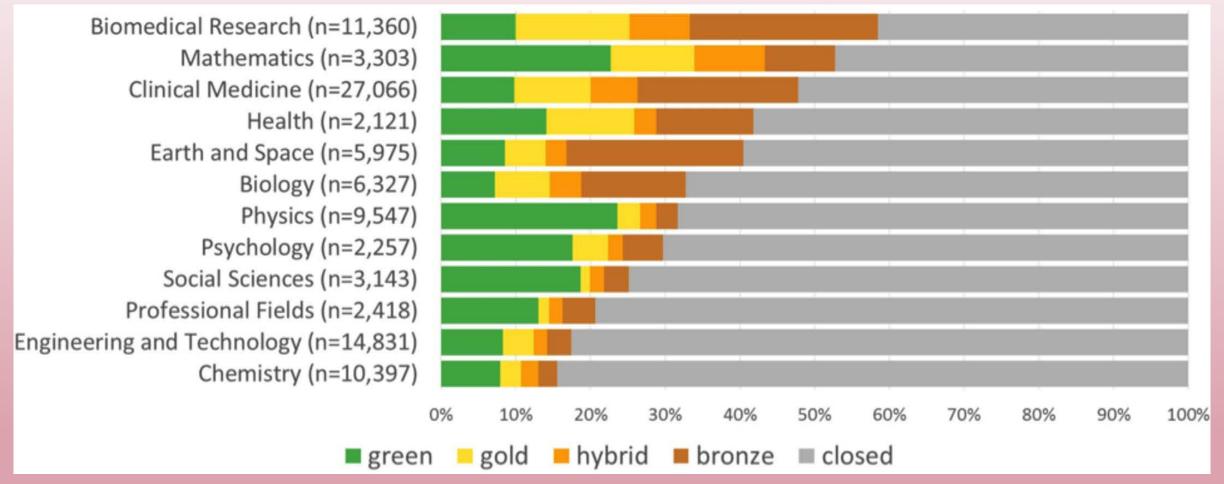
Open-access citation advantage: accounting for age and discipline, OA articles receive 18% more citations than average, an effect driven primarily by Green and Hybrid OA.

Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. *PeerJ*, 6, e4375. http://doi.org/10.7717/peerj.4375



Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. *PeerJ*, 6, e4375, p. 15. <u>http://doi.org/10.7717/peerj.4</u> <u>375</u>

Figure 6: Percentage and impact of different access types of a random sample of WoS articles and reviews with a DOI, by year of publication. Figure 4: Percentage of different access types of a random sample of WoS articles and reviews with a DOI published between 2009 and 2015 per NSF discipline (excluding Arts and Humanities).



Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. *PeerJ*, 6, e4375, p. 14. <u>http://doi.org/10.7717/peerj.4375</u>

What UConn Faculty says about OA?



"I prefer open access journals because they make my work available to a broader audience ... open access journals democratize knowledge and science" -David Wagner, Ecology & Evolutionary Biology



"Speedy publication with enhanced visibility and dissemination" - Kumar
Venkitanarayanan, Animal Science

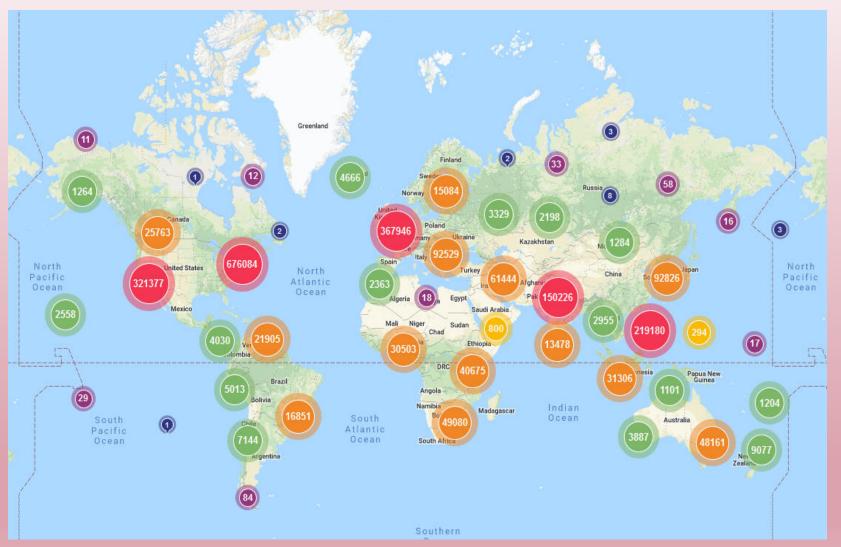
"I think open access is a good idea, at least for some papers ... I just wish it was not so expensive." - John Salamone, Psychology



A Sampling of UConn Faculty Open Access Authors

Name	Department	Gold OA articles	Green OA articles
Emmanouil Anagnostou	Civil and Environmental Engineering	15	-
Ashis Basu	Chemi stry	23	57
Craig Coleman	Pharmacy	25	155
Di pak Dey	Statistics	4	24
Sanguthevar Raj asekaran	Engi neeri ng	28	58
John Salamone	Psychol ogy	13	99
Carol yn Teschke	Molecular and Cell Biology (MCB)	5	46
Kumar Venki tanarayanan	Animal Science	15	72
David Wagner	Ecol ogy and Evol ut i onary Bi ol ogy	8	18

OpenCommons@UConn



Since 2005, visitors to our institutional repository have downloaded a total of 4,588,007 documents!

> Top countries:

- > United States
- > United Kingdom
- Indi a
- > Philippines
- ➤ Canada
- Chi na
- ➢ Australia
- ➢ Germany
- ➤ France

Type of content downloaded: Theses/Dissertations | Post & Pre-prints Articles| Conference Proceedings | Presentations | Reports

OpenCommons: Most Downloaded Articles (2005- 2018)

Title	Downloads	Cited*
Eagly, Alice H. and Johnson, Blair T., "Gender and Leadership Style: A Meta- Analysis" (1990). <i>CHIP Documents</i> . 11.	149,112	3,270
Bui, Timothy, "Explicit and Implicit Methods In Solving Differential Equations" (2010). <i>Honors Scholar Theses</i> . 119.	77,670	11
Huedo-Medina, Tania et al., "Assessing Heterogeneity in Meta-Analysis: Q Statistic or I2 Index?" (2006). <i>CHIP Documents</i> . 19	74,867	1,675
Granito, Mark and Chernobilsky, Ellina, "The Effect of Technology on a Student's Motivation and Knowledge Retention" (2012). <i>NERA Conference Proceedings</i> 2012. 17.	73,677	33
Ercole, Jacqueline, "Labeling in the Classroom: Teacher Expectations and their Effects on Students' Academic Potential" (2009). <i>Honors Scholar Theses</i> . 98.	60,006	8
Jarrin, Olga F., "An Integral Philosophy and Definition of Nursing" (2007). School of Nursing Scholarly Works. 47.	57894	33

*Data: Google Scholar

Recent Developments in Open Access

• "Coalition of European Funders Announces 'Plan S' to Require Full OA, Cap APCs, & Disallow Publication in Hybrid Journals" (SPARC site, September 4, 2018)

• Dutch Universities, Journal Publishers Agree on Open-Access Deals (*The Scientist Magazine*, April 17, 2018)

To Learn more about OA

SPARC: Advancing Open Access, Open Data, Open Education, <u>https://sparcopen.org/</u> Creative Commons: When We Share, Everyone Wins, <u>https://creativecommons.org/</u> Directory of Open Access Journals, https://doaj.org/