

Merging algorithms for MetaSearch

U4959060 PengFei Li

Supervisors: David Hawking, Paul Thomas



Topic Review

🔍 Search Information about the Nobel Prize Winner Brian Schmidt

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Australian National University Search

Brian Schmidt Search

1 - 10 of 573 search results for Brian Schmidt Advanced Search | Help

Professor Brian Schmidt and Professor Sean Carroll: The bet and Higgs...
3 Apr 2012: Nobel Laureate Professor Brian Schmidt from the ANU School of Astronomy and Astrophysics and Harvard roommate Professor Sean Carroll from CALTECH discuss the Higgs boson, Dark Energy and what led Professor Schmidt to lose his second bet with www.anu.edu.au/visior/Video/8991/ - [Cached](#)

Brian Schmidt - ANU News - ANU
30 Nov 2011: Brian Schmidt - Brian Schmidt ... Professor Brian Schmidt. Photo by Belinda Pratten. 111027: ANU, Nobel prize winner, astrophysicist Brian Schmidt. news.anu.edu.au/7attachment_id=4061 - [Cached](#)

Professor Brian Schmidt - Researchers - ANU
11 Apr 2013: Acceptance Environment. Professor Brian Schmidt: ANU College of Physical and Mathematical Sciences. ... E. Brian.Schmidt@anu.edu.au. researchers-scip.anu.edu.au/researchers/schmidt-op - [Cached](#)

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18 Apr 2013: Professor Brian Schmidt: ANU College of Physical and Mathematical Sciences. E. Brian.Schmidt@anu.edu.au. ... 461, no. 7266, pp. 1254-1257. Murphy, S, Keller, S, Schmidt, B et al 2009, 'SkyMapper and the Southern Sky Survey: A Valuable Resource for <https://researchers.anu.edu.au/researchers/schmidt-op> - [Cached](#)

Find: Brian Schmidt: Topic: Science: The Accelerating Universe

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by ANUchannel - 6,943 views - 10 months ago
ANU Nobel Laureate Professor Brian Schmidt gives a Vice-Chancellor's Public Lecture. The talk is titled 'The accelerating Universe'. 49:06

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ANU Professor Brian Schmidt gives a press conference at Canberra's Parliament House to discuss receiving the Nobel Prize for Physics. He is introd... 10:35

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Professor Brian Schmidt and Professor Sean Carroll: The bet and Higgs boson
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Nobel Laureate Professor Brian Schmidt from the ANU School of Astronomy and Astrophysics and Harvard roommate Professor Sean Carroll from CALTECH d... 7:35

Science, Politics and the Public: Breaking Down the Barriers
by ANUchannel - 247 views - 8 months ago
Nobel Laureate Professor Brian Schmidt and Executive Director of The Australia Institute Dr Richard Denniss, joined by ABC presenter Alex Sloan, di... 1:05:09

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Relevant titles entries 3-6

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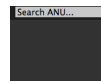
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Relevant titles entries 3-8

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18 Apr 2013: Professor Brian Schmidt, ANU College of Physical and Mathematical Sciences. E: Brian.Schmidt@anu.edu.au - 461, no. 7268, pp. 1254-1267. Murphy, S, Keller, S, Schmidt, B et al 2009, 'SkyMapper and the Southern Sky Survey: A Valuable Resource for
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[Prof. B. Schmidt: Time to Summarise The Accelerating Cosmos](#)



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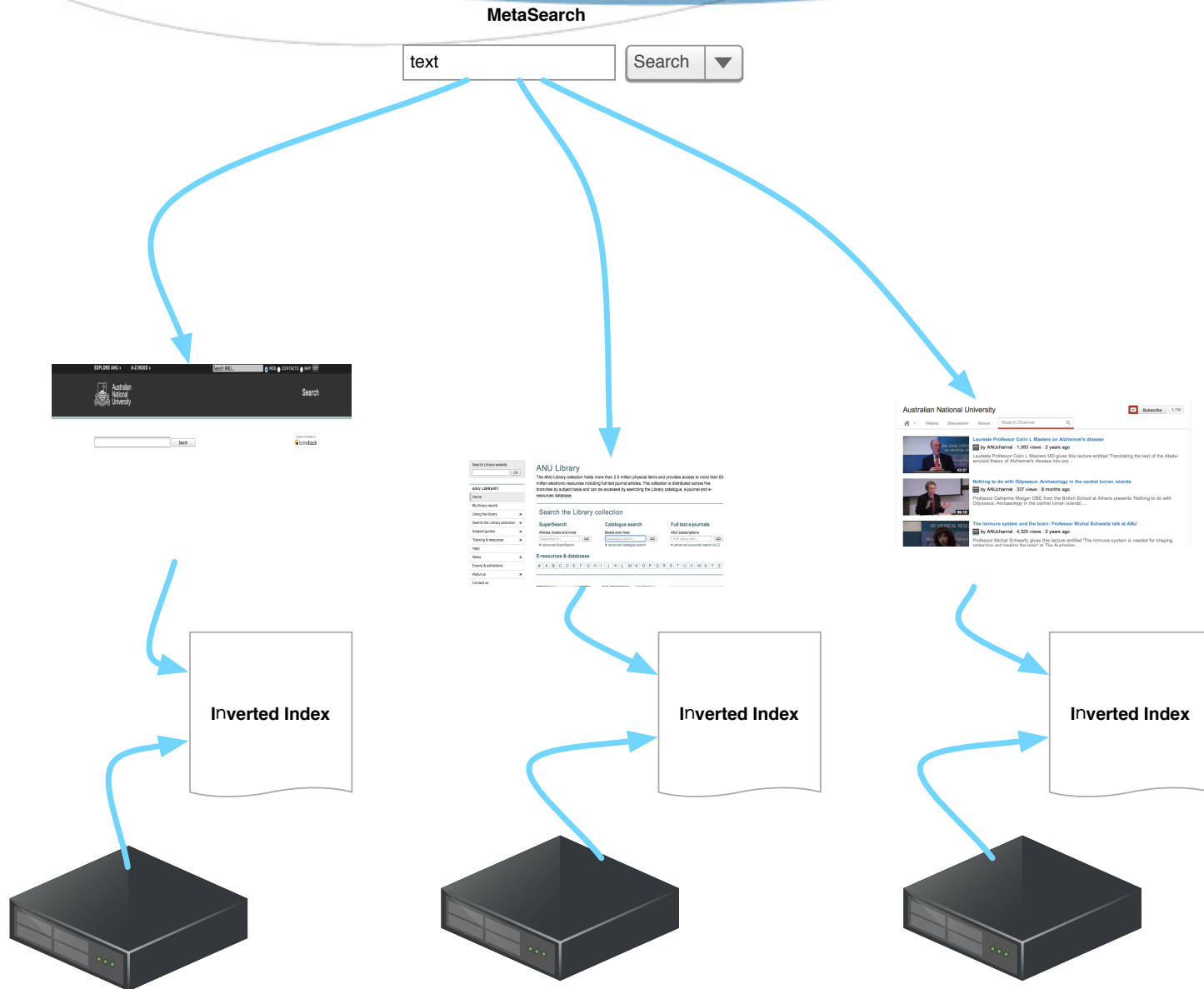
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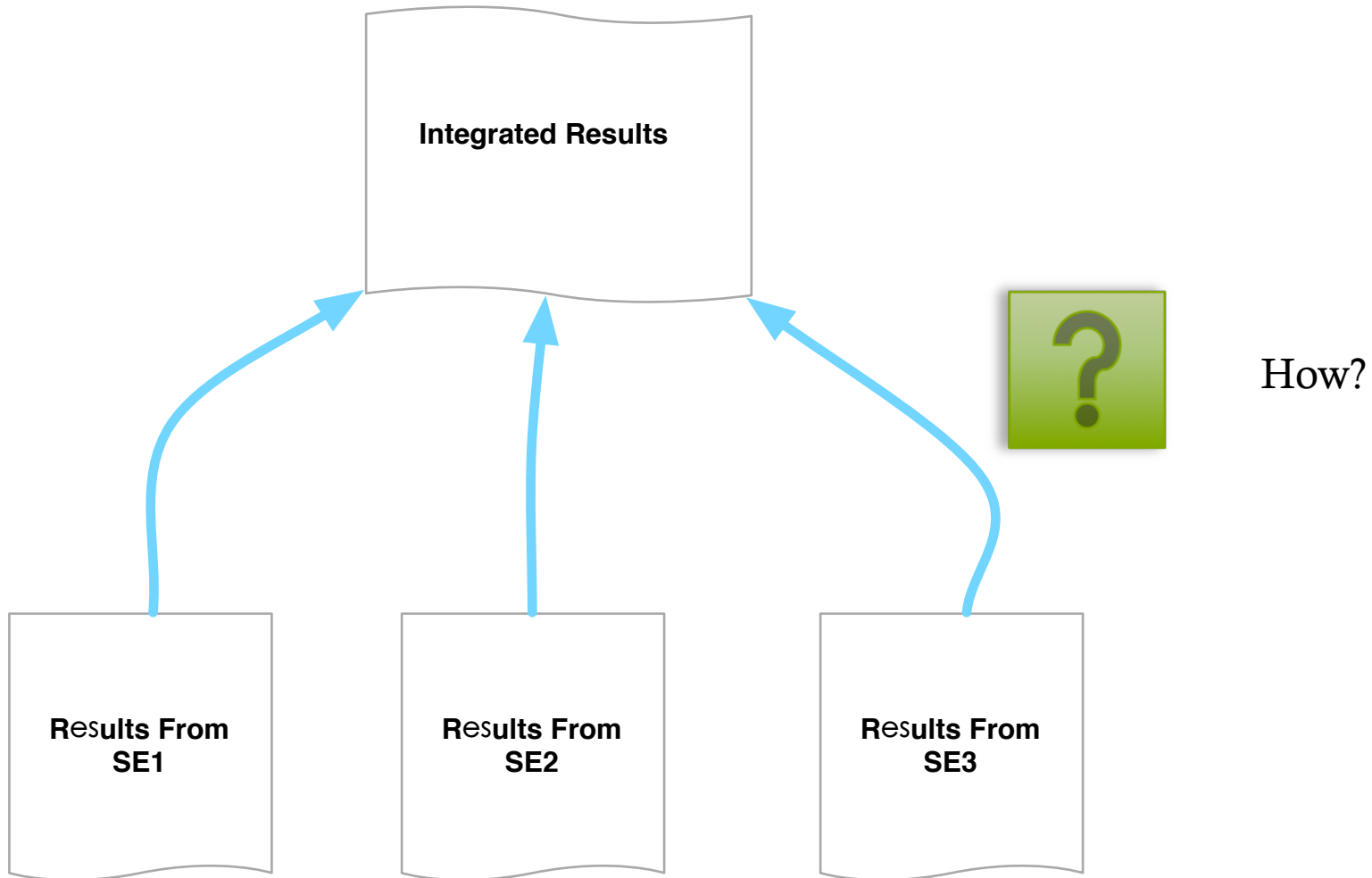
Meta-search

Search

Topic Review



Topic Review

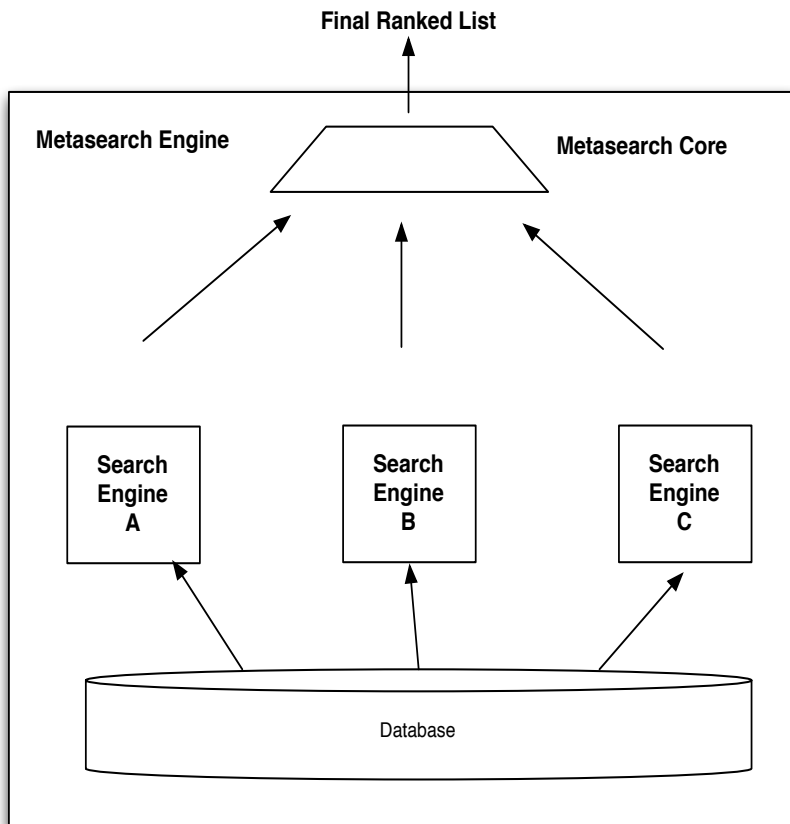


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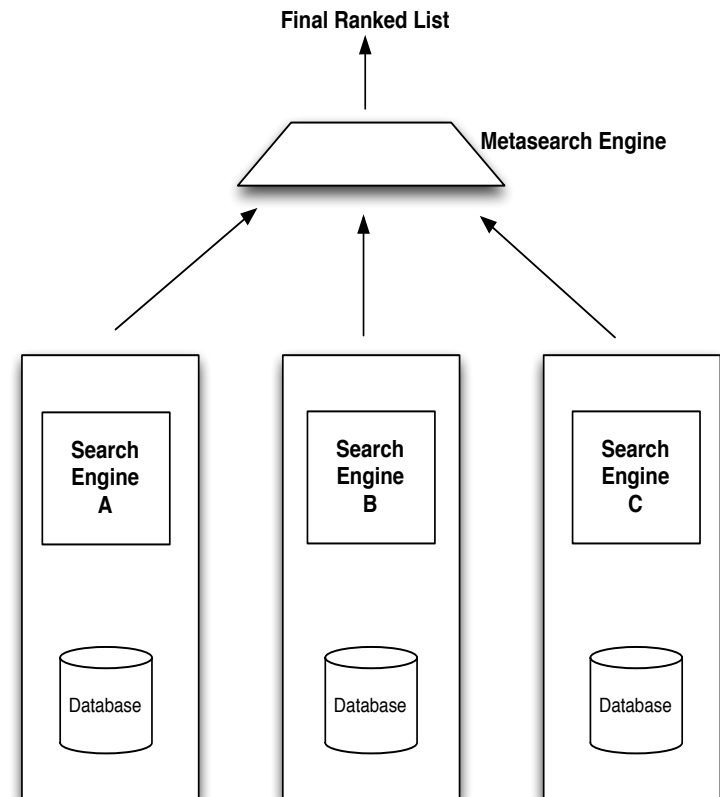
- ✔ Literature Review ✔
- ✔ Data Collection ✔
- ✔ Framework Building ✔
- ✔ Algorithm Implementation (4 Implemented)
- ✔ Algorithm Developing
- ✔ Testing
- ✔ Evaluation (On going)
- ✔ Writing (On going)

Previous Works

Aggregated Meta-search



Non-aggregated Meta-search



Previous Works

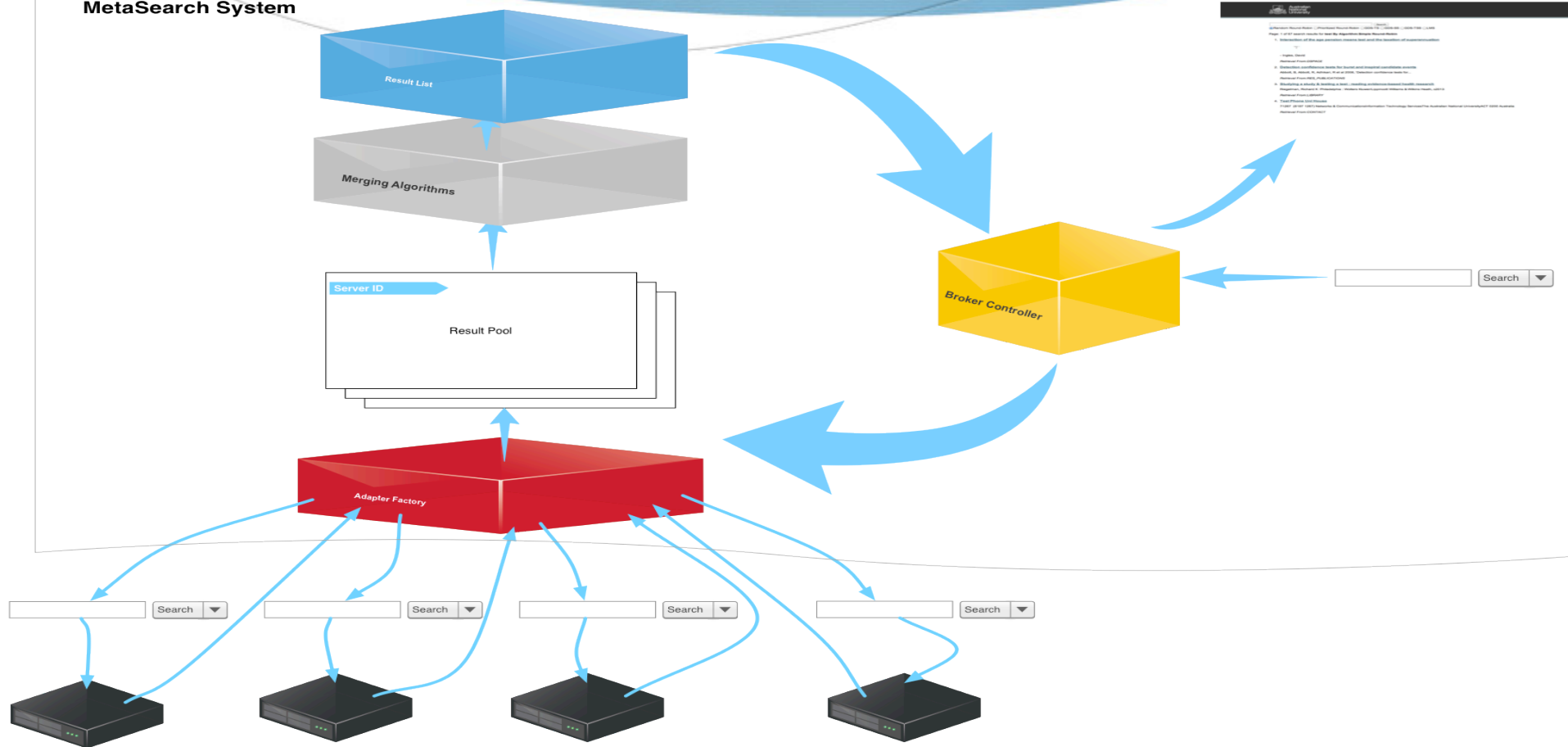
- ◆ General Methods
 - ◆ Round-Robin
 - ◆ Raw-Score Algorithms
 - ◆ Original Score
 - ◆ Estimated Score
 - ◆ Collection Weight
- ◆ Machine Learning Approaches
 - ◆ SSL
 - ◆ Document Distribution
 - ◆ Clustering
 - ◆ Bayes's theorem.

Previous Works

- ◆ Aggregated-Meta-Search-Specific Methods
 - ◆ Linear Combination
 - ◆ CombXX (Fox & Shaw 1994)
 - ◆ LC model
 - ◆ Voting Algorithm
 - ◆ Borda-fuse
 - ◆ Condorcet Fusion

Architecture

MetaSearch System



☒ Random Round-Robin ☐ Prioritized Round-Robin ☐ GDS-TS ☐ GDS-SS ☐ GDS-TSS ☐ LMS

Page: 1 of 67 search results for **test By Algorithm:Simple Round-Robin**

1. [Interaction of the age pension means test and the taxation of superannuation](#)



- Ingles, David

Retrieval From:DSpace

2. [Detection confidence tests for burst and inspiral candidate events](#)

Abbott, B, Abbott, R, Adhikari, R et al 2008, 'Detection confidence tests for...

Retrieval From:RES_PUBLICATIONS

3. [Studying a study & testing a test : reading evidence-based health research](#)

Riegelman, Richard K Philadelphia : Wolters Kluwer/Lippincott Williams & Wilkins Heath, c2013

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4. [Test Phone Uni House](#)

71267 (6197 1267) Networks & CommunicationsInformation Technology ServicesThe Australian National UniversityACT 0200 Australia

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Algorithm Implementation

- ◆ Round-Robin
- ◆ Weighted Round-Robin
- ◆ Generic document score

$$w_{ij} = \frac{NQW_i}{\sqrt{L_q^2 + LF_i^2}}$$


- ◆ LMS

Evaluation

- ◆ Evaluation Methods
- ◆ Document Score Gathering
 - ◆ Source of Queries
 - ◆ Source of Assessors
 - ◆ Query Allocation
 - ◆ User Interface
- ◆ Evaluation Process

Evaluation

💧 <http://relsevaluation.appspot.com>

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Next Step

- 💧 Executing Evaluation
- 💧 Implementing Previous Algorithms
- 💧 Evaluation cycle
- 💧 New idea (Extending SSL?)
- 💧 Thesis Writing

Question?

Thank you!

