

Due on 2016-08-18, 23:30 IST

Assignment 4

1. Consider a paper x_1 with its list of references given in figure 1(a). Find out the **Reference Diversity Index (RDI)** of this paper.
2. Consider a paper x_2 with its list of citing papers given in 1(b). Find out the **Citation Diversity Index (CDI)** of this paper.

References:

1. On Extremal Set Partitions in Cartesian Product Spaces
field: algorithms_and_theory
2. The Sandwich Theorem
field: algorithms_and_theory
3. An evolutionary autonomous agents approach to image feature extraction
field: algorithms_and_theory
4. Smooth Object Retrieval using a Bag of Boundaries
field: algorithms_and_theory
5. A Peptide Filtering Relation Quantifies MHC Class I Peptide Optimization
field: bioinformatics_and_computational_biology
6. The OODB Path-Method Generator (PMG) Using Access Weights and Precomputed Access Relevance
field: databases
7. A dichotomy theorem for learning quantified Boolean formulas
field: machine_learning_and_pattern_recognition
8. Experiments with subdivision of search in distributed theorem proving
field: distributed_and_parallel_computing
9. Modeling skin and ageing phenotypes using latent variable models in Infer.NET
field: machine_learning_and_pattern_recognition
10. Computer Productivity Initiative
field: computer_education
11. XTP/PE Design Considerations
field: computer_education
12. Teaching Parallel Computing to Freshmen
field: computer_education

(a)

Citing Papers:

1. On Extremal Set Partitions in Cartesian product Spaces
Field: algorithms_and_theory
2. The Sandwich Theorem
Field: algorithms_and_theory
3. Smooth Object Retrieval using a Bag of Boundaries
Field: algorithms_and_theory
4. How language structures space
Field: artificial_intelligence
5. A Survey of Optimization by Building and Using Probabilistic Models
Field: artificial_intelligence
6. Image Analysis Applied to Morphological Assessment in Bovine Livestock
Field: artificial_intelligence
7. Maximum Entropy Weighting of Aligned Sequences of Proteins or DNA
Field: bioinformatics_and_computational_biology
8. Template Matching: Matched Spatial Filters and beyond
Field: bioinformatics_and_computational_biology
9. Modeling skin and ageing phenotypes using latent variable models in Infer.NET
Field: machine_learning_and_pattern_recognition
10. Computer Productivity Initiative
Field: computer_education
11. Adaptable Scripting in Computer-Supported Collaborative Learning to Foster Knowledge and Skill Acquisition
Field: computer_education
12. Depth Computations from Polyhedral Images
Field: computer_vision
13. Markov/Gibbs texture modeling: aura matrices and temperature effects
Field: computer_vision
14. A Computational Model for Detecting Image Changes
Field: computer_vision

(b)

Figure 1: (a) list of references of paper x_1 and (b) List of citing papers of x_2

3. Consider a set of papers Z_1, Z_2, \dots, Z_8 citing a paper y_1 whose corresponding citation contexts are provided in 2. The years of publication of the citing papers are as follows: Z_1 : 2003, Z_2 : 2004, Z_3 : 2004, Z_4 : 2005, Z_5 : 2005, Z_6 : 2006, Z_7 : 2005, Z_8 : 2004.

- (a) Calculate the **average count** X of y_1 for the year 2005.
- (b) Calculate the **average citeWords** of y_1 for the year 2004.

Citation contexts:

Z1: Ethernet has been presented in previous works (Y_1) but current JFS implementation shows major improvements: (1) adds Myrinet support, (2) optimizes Java I/O sockets instead of NIO sockets in order to extend its applicability, (3) avoids the need of primitive data type array serialization, (4) reduces even more buffering and unnecessary copies and (5) adds an optimized shared memory protocol

Z1: Moreover, they are a good estimate for JVM sockets performance, as they show similar results (Y_1)

Z2: The result within this project was a Java communication middleware transparent to the user, interoperable with other systems, does not need source code modification and offers widely spread APIs (Java Sockets and Java RMI) (Y_1) that consists of:

Z3: Motivations for ASIPs: There are many reasons for the emergence of ASIPs as an important new design style in integrated circuit design (Y_1)

Z3: The work described by (Y_1) as well as that by (Y_2) are also steps in the right direction

Z4: While we have previously addressed partial occlusion adjacent to regions of complete occlusion (Y_1) this work describes an extension to handle regions of partial occlusion without corresponding regions of complete occlusion

Z5: In both these methods, as in our previous work (Y_1) it is assumed that there is some region of the image in which only the foreground is present

Z5: In (Y_1) it was shown that it is possible to remove the partial occlusion when the location and width of the partially occluded region are found by a user

Z5: In the current paper we present an automated solution to this vision task for severely blurred occluding objects and in doing so significantly extend the applicability of the method in (Y_1)

Z6: In (Y_1) it was shown that the well-known matting equation,

Z7: From d and the width w of the partially occluded region, the value is well-approximated by (Y_1)

Z8: This can be done if the user supplies both w and the boundary between regions complete and partial occlusion, as in (Y_1)

Z8: this example, the partial occlusion is due to the handle of a fork directly in front of the authors of (Y_1) have made this image available to the public

Z8: Once the blur width is estimated, the method of (Y_1) is used to remove the partial occlusion without in-painting

Figure 2: The list of citation contexts of y_1 . Note the citations to y_1 are mentioned in the contexts as (y_1) while citations to other papers are represented by integers.

Your Submission:

Due Date Exceeded.

As per our records you have not submitted this assignment.

© 2014 NPTEL - Privacy & Terms - Honor Code - FAQs -



A project of



In association with



Funded by



Powered by

