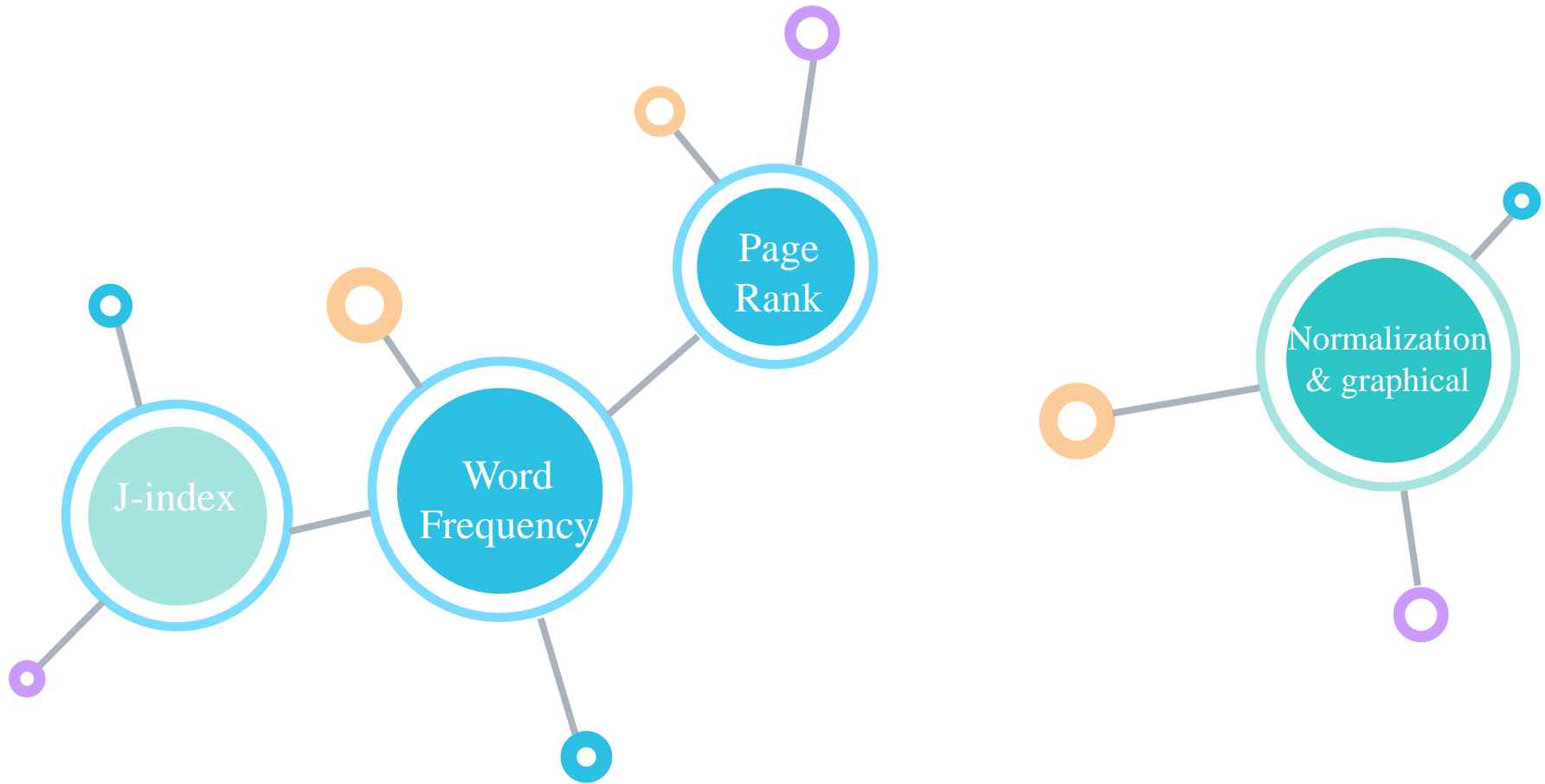


Optimization of References &  
Normalized and Graphical  
processing



# CONTENTS



## About J-index

As we all know, whichever word of a paper must have its own topic. Now, we assume the amount of papers is  $N$ , the amount of the papers is  $K$ , all the words are from the  $N$  papers &  $K$  topics. And the word is created or cited is not sure. We use J-index to judge the words value and presents the value of the paper.

## About Page Rank

The paper which was cited are different because of the papers who are citing them. Normally, that is to say , more valuable papers who are citing it have more positive influence on the paper cited. I will introduce the recursion algorithm

## About Word Frequency

As we can see, the amount of the words of a field is enormous. But there must be overlapped words in papers , and in this way we assume the frequency of the words presents the value of the word to some extent.

## Graphical Step



### About Imaging

As we can see, the most visual way to present something is graph. And I would like to show the Reference value of the paper and the connections of papers in the graph.

## Normalized Step



### About Normalization

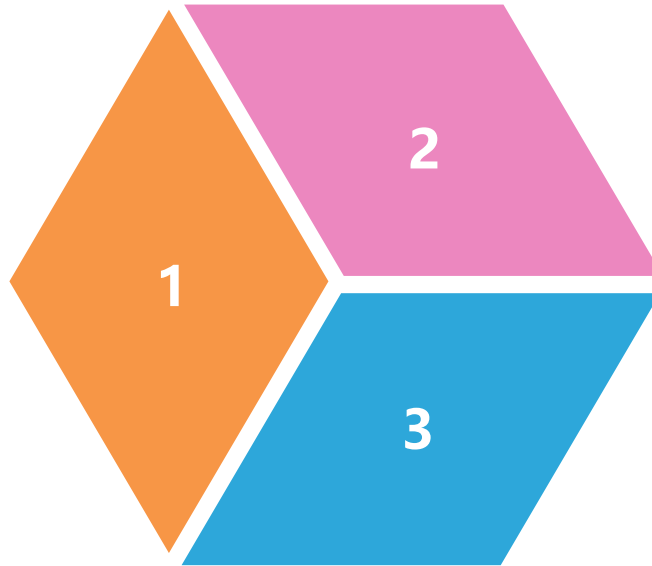
People also want to value the level of the papers from different fields. So I would like to create a Normalization way to help to make the evaluation come true.



## Gibbs Sampling & Random distribution

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- Choose a topic
- A certain Sample
- Reference Connection
- Stop word & Stem Word



## Page Rank Algorithm

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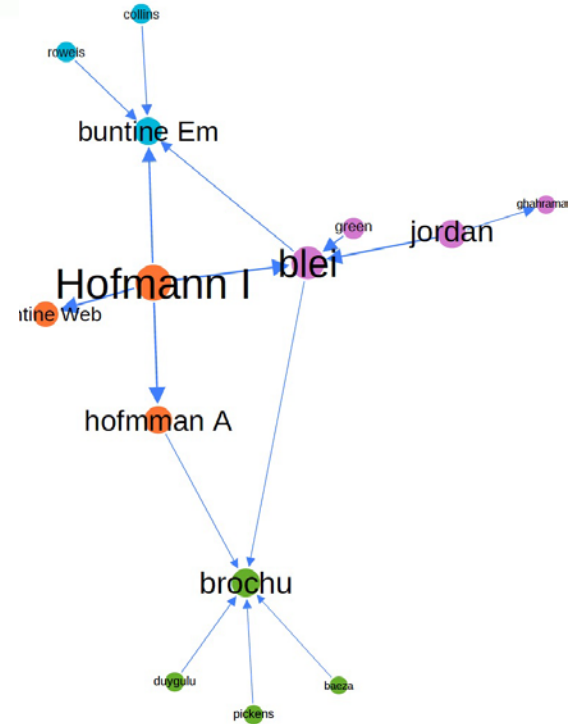
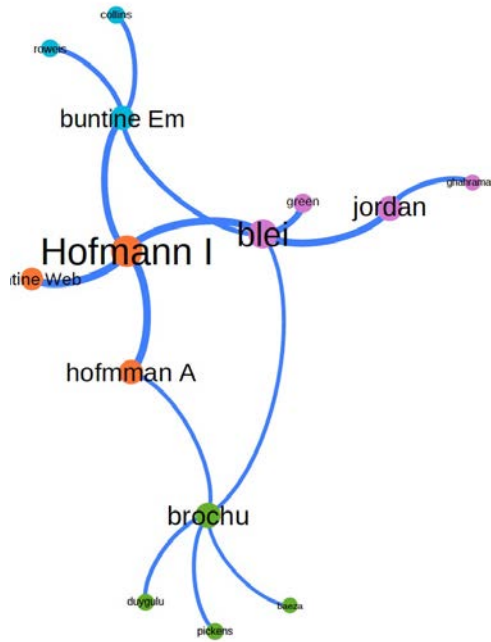
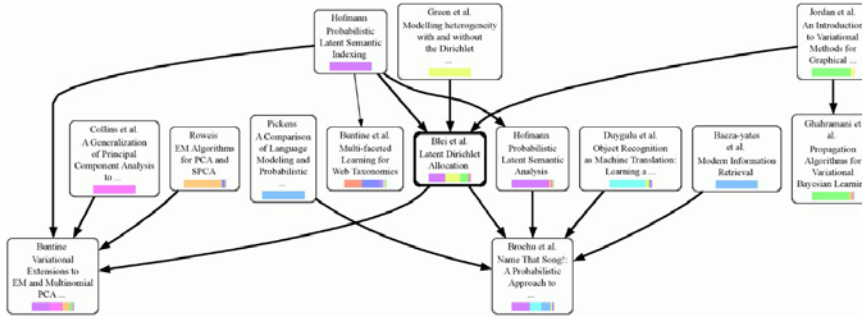
- Circulation Algorithm
- Stable Condition
- Boundary Condition

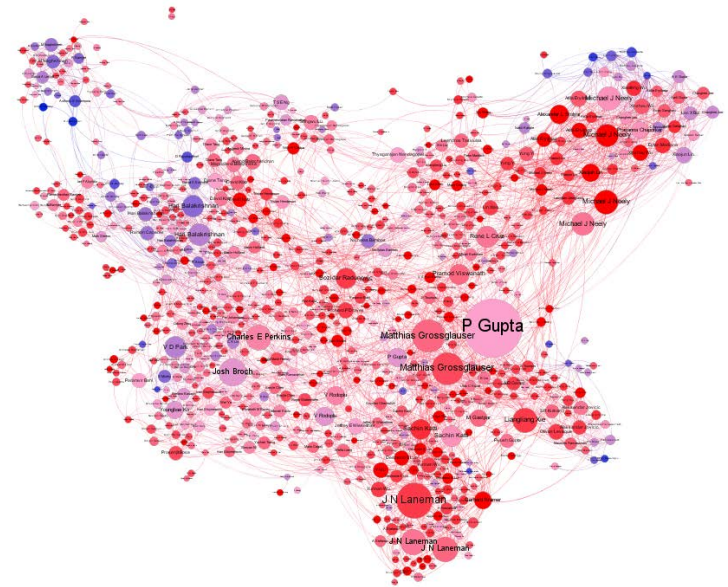
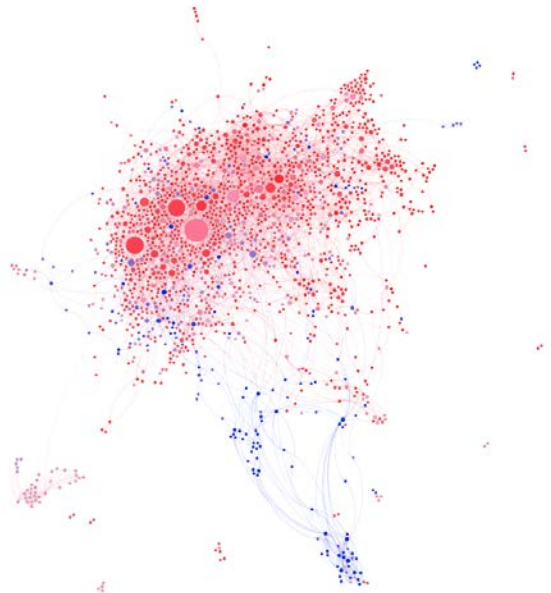
## Normalization condition

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- Similar Field
- Score map

# Sample





Thanks:

Dr. Xinbing Wang

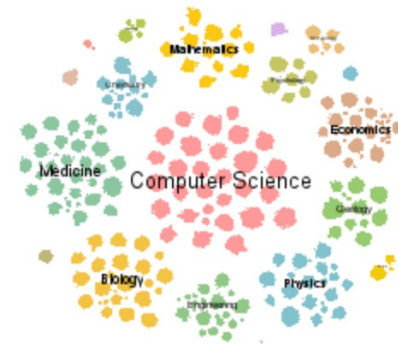
Yuting Jia

Weijie Tang

Xi Zhang

Hao wu

Jiefeng Li





Thank You!