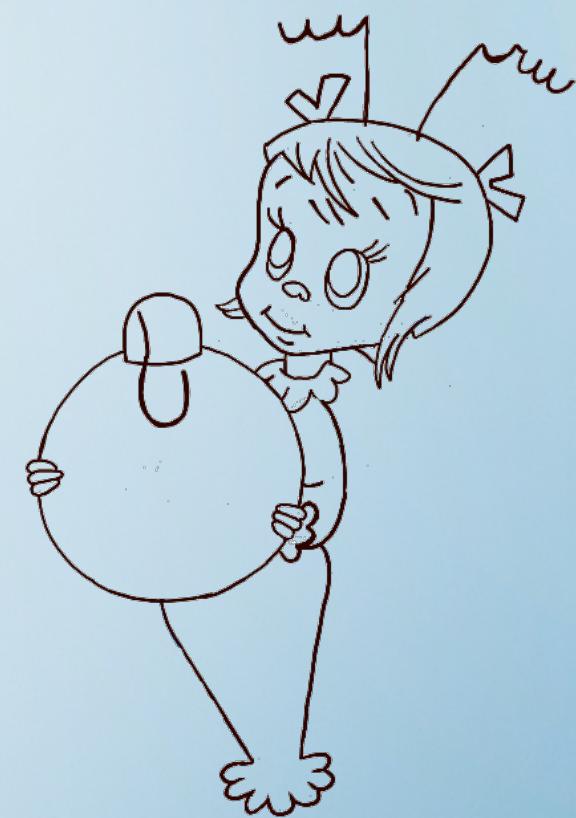


Journal Finder

Yanxi Lu Who
11/10/2017



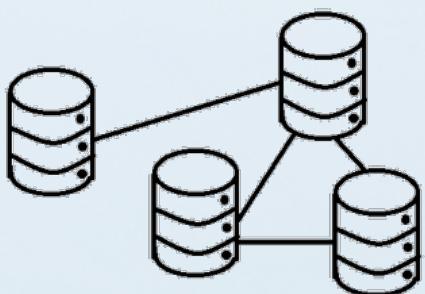
Introduction

- Finding the journals that could be best suited for publishing your paper
- Input: Your Abstract
- Output: Journals best suited to your articles
- Output: Similar Abstracts to your articles
- Assumed “the best suited” means “the most similar”



Database

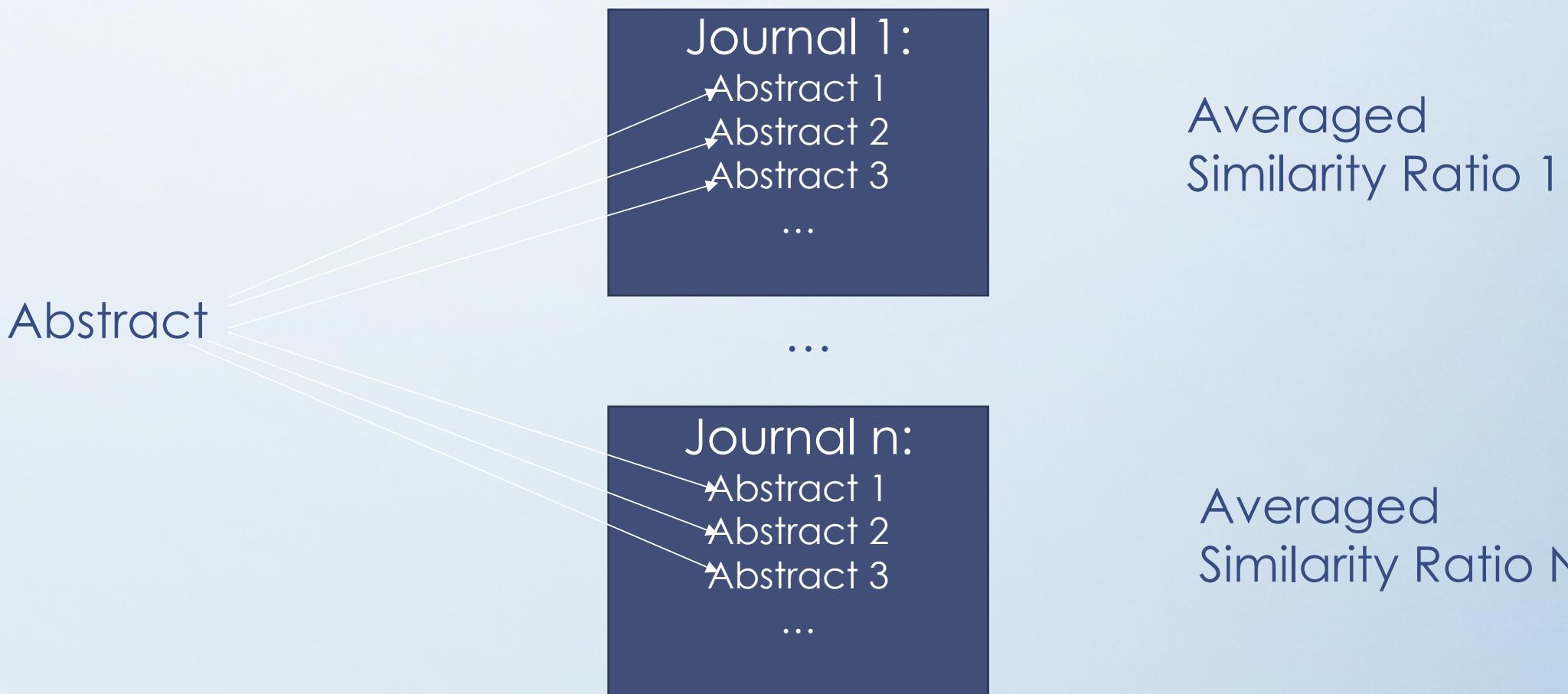
- The Journal articles on Machine Learning from 2000-2017
- ~8000 Abstracts, ~15 Journals from ELSEVIER
- Scrapped by ELSEVIER API
 - Titles of research papers
 - Abstracts
 - Key words



28 ELSEVIER	Information Fusion	ISSN:1566-2535 , Quarterly
29 ELSEVIER	Automatica	ISSN:0005-1098 , Monthly
32 ELSEVIER	Neural Networks	ISSN:0893-6080 , Monthly
43 ELSEVIER	Information Sciences	ISSN:0020-0255 , Semimonthly
45 ELSEVIER	Artificial Intelligence	ISSN:0004-3702 , Monthly
47 ELSEVIER	Pattern Recognition	ISSN:0031-3203 , Monthly
48 ELSEVIER	Knowledge-Based Systems	ISSN:0950-7051 , Bimonthly
70 ELSEVIER	Expert Systems with Applications	ISSN:0957-4174 , Semimonthly
101 ELSEVIER	Neurocomputing	ISSN:0925-2312 , Semimonthly

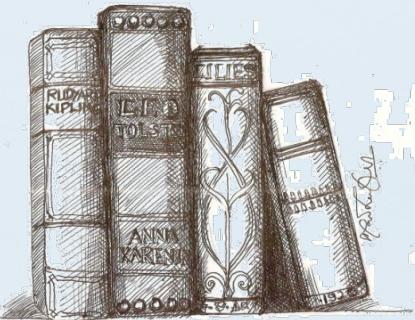
Method

1. Comparing similarities between input abstract and **each abstract** from the journals.



Method

- Document Vector in **Word Space** ----- Cosine Similarity
 - TFIDF ----- LSI
 - Word2Vector Model
- Document Vector in **Topic Space** ----- Cosine Similarity
 - LDA



Method

2. Classification



Models: Random Forest Classifier, Logistic regression, Gradient Boosting

Input Abstract



?

Result

1. Comparing Similarities:

- Word2Vector Based on Google Model
- Flask App

2. Classification Model: Random Forest

- Precision: 0.87
- Recall: 0.85
- F1 Score 0.85

Future Work

- Expanding the database, adding more journals and abstracts.
- Analyzing the topics of the journals.



Thank you!

