Topic Modelling Resources

Keefellow

2022-03-13

Contents

1	Abo	out this collection	5
2	Textbooks		7
	2.1	Mastering Text Mining with R	7
	2.2	Practical Text Mining and Statistical Analysis for Non-structured Text Data Applications	7
	2.3	Text Mining with R	7
	2.4	Natural Language Processing with Python and spaCy	8
3	We	bsite Resources	9
	3.1	Apache OpenNLP library is a machine learning based toolkit for the processing of natural language text	9
	3.2	The Stanford Natural Language Processing Group	9
	3.3	The Summer Institutes in Computational Social Science $\ .\ .\ .\ .$	9
	3.4	Computational Social Science (Soc 690)	10
4	Jou	rnal Articles	11
	4.1	A review of topic modeling methods	11
	4.2	Using Topic Modeling Methods for Short-Text Data: A Comparative Analysis	11
	4.3	Topic Modeling: A Comprehensive Review	11
5	You	aTube Resources	13
	5.1	SICSS 2018 - Topic Models/Structural Topic Models (Day 3. June 20, 2018)	13
	5.2	Structure Topic Modelling	13

4 CONTENTS

6	Stru	actural Topic Modelling	15		
	6.1	stm: R Package for Structural Topic Models	15		
	6.2	Tutorials	15		
7	Publications 1				
	7.1	The Structural Topic Model and Applied Social Science $\ \ldots \ \ldots$	17		
	7.2	Structural Topic Models for Open-Ended Survey Responses $\ .\ .$.	17		
	7.3	Mining quality determinants of product-service systems from user-generated contents	17		
	7.4	COVID-19 Twitter Communication of Major Societal Stakeholders: Health Institutions, the Government, and the News Media $$.	17		
	7.5	Topic Modeling and User Network Analysis on Twitter during World Lupus Awareness Day	18		
	7.6	Toward understanding the topical structure of hospitality literature: Applying machine learning and traditional statistics	18		
	7.7	Topic Modeling as a Strategy of Inquiry in Organizational Research: A Tutorial With an Application Example on Organization			
		tional Culture	18		
8	Yet	to classify	19		
	8.1	Apache OpenNLP library is a machine learning based toolkit for the processing of natural language text	19		

About this collection

There are plenty of resources for learning topic modelling, and this holds some of them.

Textbooks

2.1 Mastering Text Mining with R

Chapter 5. Text Summarization and Clustering - Topic modeling - Latent semantic analysis - Machine learning-based text summarization - Text clustering - Sentence completion https://learning.oreilly.com/library/view/mastering-text-mining/9781783551811/ch05.html

2.2 Practical Text Mining and Statistical Analysis for Non-structured Text Data Applications

An Exploratory Literature Survey Using Text Mining and Beyond : A practical example https://learning.oreilly.com/library/view/practical-text-mining/9780123869791/xhtml/CHP005.html#CESECTITLE0100

2.3 Text Mining with R

Chapter on Topic Modelling https://learning.oreilly.com/library/view/text-mining-with/9781491981641/ch06.html

2.4 Natural Language Processing with Python and spaCy

Linguistic Primer https://learning.oreilly.com/library/view/natural-language-processing/9781098122652/xhtml/app01.xhtml#lev174

Extracting and using linguistic features https://learning.oreilly.com/library/view/natural-language-processing/9781098122652/xhtml/ch04.xhtml#lev45

Website Resources

 $\#\#\mathrm{Topic}$ Models Learning and R Resources <code>https://github.com/trinker/topicmodels_learning</code>

3.1 Apache OpenNLP library is a machine learning based toolkit for the processing of natural language text.

https://opennlp.apache.org/

3.2 The Stanford Natural Language Processing Group

https://nlp.stanford.edu/software/

3.3 The Summer Institutes in Computational Social Science

Open source teaching and learning resources for computational social science https://sicss.io/overview Previous editions https://github.com/compsocialscience/summer-institute

3.4 Computational Social Science (Soc 690)

 $\label{lem:course_course} Course \ materials \ from \ Duke \ University \ https://cbail.github.io/comp_soc_grad/Home.html\#An_Introduction_to_Text_Analysis$

Journal Articles

4.1 A review of topic modeling methods

https://doi.org/10.1016/j.is.2020.101582~See~Fig~8~for~Decision~tree~for~selecting~a~topic~modeling~method.~https://ars-els-cdn-com.libproxy.nie.edu.sg/content/image/1-s2.0-S0306437920300703-gr8.jpg

4.2 Using Topic Modeling Methods for Short-Text Data: A Comparative Analysis

https://www.frontiersin.org/articles/10.3389/frai.2020.00042/full

4.3 Topic Modeling: A Comprehensive Review

https://eprints.eudl.eu/id/eprint/682/1/eai.13-7-2018.159623.pdf

YouTube Resources

5.1 SICSS 2018 - Topic Models/Structural Topic Models (Day 3. June 20, 2018)

https://www.youtube.com/watch?v=k-zkxdxyjTk

5.2 Structure Topic Modelling

 $https://www.youtube.com/watch?v{=}3kcjbzy4UPM$

Structural Topic Modelling

6.1 stm: R Package for Structural Topic Models

https://cran.r-project.org/web/packages/stm/vignettes/stmVignette.pdf

6.2 Tutorials

Publications

7.1 The Structural Topic Model and Applied Social Science

https://scholar.princeton.edu/files/bstewart/files/stmnips2013.pdf

7.2 Structural Topic Models for Open-Ended Survey Responses

https://scholar.harvard.edu/files/dtingley/files/topicmodelsopenendedexperiments. pdf

7.3 Mining quality determinants of productservice systems from user-generated contents

https://doi.org/10.1080/08982112.2021.1877305

7.4 COVID-19 Twitter Communication of Major Societal Stakeholders: Health Institutions, the Government, and the News Media

https://ijoc.org/index.php/ijoc/article/view/17147/3575

7.5 Topic Modeling and User Network Analysis on Twitter during World Lupus Awareness Day

https://dx.doi.org/10.3390%2Fijerph17155440

7.6 Toward understanding the topical structure of hospitality literature: Applying machine learning and traditional statistics.

https://psycnet.apa.org/doi/10.1108/IJCHM-11-2017-0714

7.7 Topic Modeling as a Strategy of Inquiry in Organizational Research: A Tutorial With an Application Example on Organizational Culture

 $\rm https://doi.org/10.1177/1094428118773858$

Yet to classify

8.1 Apache OpenNLP library is a machine learning based toolkit for the processing of natural language text.

https://opennlp.apache.org/

https://learning.oreilly.com/library/view/mastering-text-mining/9781783551811/ch05.html

 $https://learning.oreilly.com/library/view/practical-text-mining/9780123869791/\\ xhtml/CHP005.html\#CESECTITLE0100$

https://learning.oreilly.com/library/view/text-mining-with/9781491981641/ch06.html

https://learning.oreilly.com/library/view/natural-language-processing/9781098122652/xhtml/app01.xhtml#lev174

Be familiar with document term matrix

https://www.youtube.com/watch?v=k-zkxdxyjTk download this video

https://sicss.io/overview https://cbail.github.io/comp_soc_grad/Home.html#An_Introduction_to_Text_Analysis

https://github.com/compsocialscience/summer-institute

https://sicss.io/locations#2017

 $https://doi-org.libproxy.nie.edu.sg/10.1016/j.is.2020.101582 \qquad https://ars-els-cdn-com.libproxy.nie.edu.sg/content/image/1-s2.0-S0306437920300703-gr8.jpg$

https://www.frontiersin.org/articles/10.3389/frai.2020.00042/full

https://eprints.eudl.eu/id/eprint/682/1/eai.13-7-2018.159623.pdf

A review of topic modeling methods https://doi.org/10.1016/j.trc.2017.12.018