

Topic 0 Word	Topic 0 Probability	Topic 1 Word	Topic 1 Probability	Topic 2 Word	Topic 2 Probability
ontology, knowledge, domain, software, modeling		web, page, user, search, document		spatial, stream, histogram, object, geometric	
ontology	0.04184193164110184	web	0.0741838812828064	spatial	0.0379461869597435
knowledge	0.024211250245571136	page	0.039943378418684006	stream	0.03690031170845032
domain	0.021222418174147606	user	0.023216411471366882	histogram	0.01960415579378605
software	0.019188974052667618	search	0.02106926403939724	object	0.016854604706168175
modeling	0.017411718145012856	document	0.01758892834186554	geometric	0.016763154417276382
conceptual	0.013531770557165146	content	0.01715676859021187	time	0.015057377517223358
engineering	0.012719736434519291	site	0.016429312527179718	compression	0.014708288013935089
tool	0.011511090211570263	multimedia	0.011063839308917522	window	0.014485795982182026
expert	0.009810504503548145	authorization	0.0107693150639534	file	0.012985632754862309
system	0.009354909881949425	retrieval	0.010192603804171085	topological	0.012265974655747414
semantic	0.009179037064313889	request	0.009743276983499527	summary	0.012251487001776695
quality	0.008628115057945251	html	0.009651338681578636	signature	0.0116184176877141
development	0.007981260307133198	query	0.009470634162425995	spatiotemporal	0.010080046951770782
concept	0.007886539213359356	engine	0.009185382165014744	sliding	0.009915588423609734
ontological	0.007858127355575562	wrapper	0.008828612975776196	keyword	0.009892906993627548
mapping	0.0077092875726521015	table	0.008729852735996246	qtp	0.008485629223287106
requirement	0.006839147303253412	keyword	0.00852063950151205	rough	0.007805187720805407
reasoning	0.006494526285678148	information	0.008301490917801857	boundary	0.007602475583553314
model	0.006447894964367151	snippet	0.008111769333481789	temporal	0.0072233849205076694
methodology	0.006141092162579298	session	0.007862353697419167	series	0.007174305617809296
natural	0.005564511753618717	navigation	0.007770403288304806	ldsq	0.007126730866730213
reuse	0.0053619383834302425	tag	0.0075937858782708645	geospatial	0.006977689918130636
architecture	0.005350285675376654	relevant	0.006972672883421183	line	0.006460303906351328
alignment	0.005325989332050085	gridcell	0.006602303124964237	segment	0.006353357806801796
goal	0.005323230288922787	crawler	0.006539439782500267	velocity	0.0063370089046657085
library	0.005227610003203154	website	0.006406087428331375	flash	0.005556865595281124
theory	0.0050195567309856415	interest	0.006403740029782057	thicket	0.005434183403849602
acquisition	0.004927278961986303	fragment	0.006395834498107433	database	0.0053472197614610195
base	0.004925773479044437	server	0.006081634201109409	location	0.005197420716285706
artifact	0.004879951477050781	social	0.005424198694527149	uncertainty	0.005145471077412367

Topic 3 Word	Topic 3 Probability	Topic 4 Word	Topic 4 Probability	Topic 5 Word	Topic 5 Probability
record, medical, recommendation, decision, rating		approach, information, problem, different, framework		view, source, warehouse, system, database	
record	0.020047340542078018	approach	0.0056747556664049625	view	0.03852595388889313
medical	0.019031014293432236	information	0.003922947216778994	source	0.0230758935213089
recommendation	0.01610327512025833	problem	0.0037204185500741005	warehouse	0.02163168042898178
decision	0.016057072207331657	different	0.0037123907823115587	system	0.020809972658753395
rating	0.013799648731946945	framework	0.003611586056649685	database	0.01950656622648239
prediction	0.012705017812550068	technique	0.0034355917014181614	olap	0.01939219981431961
user	0.012287971563637257	application	0.0029270376544445753	integration	0.016681145876646042
score	0.01174993347376585	new	0.002923049032688141	multidimensional	0.015944544225931168
healthcare	0.01166128646582365	used	0.002886480651795864	schema	0.015123087912797928
preference	0.009901530109345913	use	0.0028746805619448423	cube	0.012119293212890625
disease	0.009796196594834328	method	0.0028488857205957174	aggregation	0.011625036597251892
health	0.009672208689153194	analysi	0.002649460919201374	etl	0.011493626050651073
patient	0.009311111643910408	one	0.002638265723362565	global	0.010800701566040516
dataset	0.009246696718037128	present	0.0025873417034745216	materialized	0.010433132760226727
dt	0.009009601548314095	work	0.002559485612437129	rule	0.00988385733217001
entity	0.008856957778334618	many	0.002558242529630661	nosql	0.00986920204013586
tweet	0.008117842487990856	however	0.002541559748351574	production	0.008867659606039524
missing	0.007643620949238539	several	0.002379254437983036	local	0.008520505391061306
anomaly	0.007631016429513693	provide	0.0023614310193806887	coupling	0.007210339419543743
tree	0.007342764642089605	two	0.0023320463951677084	store	0.007023915182799101
blocking	0.007235011551529169	study	0.002302066655829549	target	0.006973538547754288
clinical	0.007092659827321768	based	0.002289166208356619	heterogeneou	0.006753067020326853
uncertainty	0.007061841432005167	support	0.0022851242683827877	level	0.0065803988836705685
bia	0.007026336155831814	right	0.0022448599338531494	expert	0.006429159082472324
model	0.006887889467179775	set	0.0022447053343057632	rewriting	0.00626172311604023
linkage	0.006794879212975502	proposed	0.0021817584056407213	md	0.006041571963578463
accuracy	0.00676971860229969	propose	0.002177190501242876	warehousing	0.0053007276728749275
regression	0.006719903089106083	important	0.00216669007204473	stage	0.00526728481054306
estimate	0.006357956677675247	reserved	0.0021593712735921144	programming	0.005184078123420477
explanation	0.006288992241024971	first	0.0021378067322075367	relation	0.005177834536880255

Topic 6 Word	Topic 6 Probability	Topic 7 Word	Topic 7 Probability	Topic 8 Word	Topic 8 Probability
classification, learning, feature, classifier, selection		similarity, question, word, semantic, test		xml, query, document, relational, schema	
classification	0.027356432750821114	similarity	0.01690567098557949	xml	0.05021579563617706
learning	0.025696421042084694	question	0.016749391332268715	query	0.04441487416625023
feature	0.021207628771662712	word	0.014325734227895737	document	0.022281968966126442
classifier	0.017550822347402573	semantic	0.012240375392138958	relational	0.01996588706970215
selection	0.013585647568106651	test	0.011392979882657528	schema	0.01673230528831482
machine	0.010594758205115795	sentence	0.01018925104290247	temporal	0.01604139618575573
method	0.01050695963203907	task	0.00866760779172182	algebra	0.01048324815928936
topic	0.010449014604091644	text	0.008235858753323555	sql	0.009623812511563301
accuracy	0.009753575548529625	speech	0.00818669330328703	mapping	0.00958127249032259
algorithm	0.0081096850335598	embedding	0.0077680260874331	structural	0.009068864397704601
random	0.007954672910273075	measure	0.007751339580863714	interface	0.008867565542459488
model	0.007741475943475962	english	0.007710532285273075	graph	0.008363956585526466
probability	0.007708348799496889	lexical	0.007638676092028618	querying	0.008068813011050224
sample	0.007185833528637886	ticket	0.007501834537833929	operator	0.007605115883052349
bayesian	0.007156399078667164	parse	0.007435094099491835	path	0.007380684372037649
training	0.007085754536092281	natural	0.007415037136524916	tree	0.006939576007425785
dataset	0.006969394627958536	dataset	0.007082066033035517	rdf	0.006805616896599531
set	0.00686183525249362	language	0.007035244256258011	change	0.006554643157869577
preprocessing	0.006696995813399553	qo	0.006384965498000383	processing	0.00649117399007082
class	0.006419361103326082	conversational	0.006349500268697739	storage	0.00630616070702672
taxonomy	0.006090582814067602	arabic	0.006235252134501934	answer	0.006113635376095772
statistical	0.006065627560019493	testing	0.00622748164460063	language	0.005877411458641291
protein	0.00588564295321703	expert	0.0060148718766868114	optimization	0.005841740407049656
estimation	0.005840832367539406	metric	0.005983717739582062	sparql	0.005834653507918119
learner	0.005663836374878883	entity	0.005888091865926981	xpath	0.0057220542803406715
supervised	0.00556348729878664	syntactic	0.005803045351058245	semantic	0.005474577192217112
based	0.00555225508287549	evaluate	0.005491281859576702	nested	0.00543648237362504
ranking	0.005419265478849411	speaker	0.0051229577511549	logical	0.0053239986300468445
correlation	0.0054051559418439865	distance	0.005075226072221994	node	0.005236152093857527
noise	0.0052775125950574875	recognition	0.005027070175856352	structure	0.005158681888133287

Topic 9 Word	Topic 9 Probability	Topic 10 Word	Topic 10 Probability	Topic 11 Word	Topic 11 Probability
query, algorithm, join, index, time		text, news, document, sentiment, social		image, feature, retrieval, prediction, deep	
query	0.01790616288781166	text	0.027659500017762184	image	0.03598586469888687
algorithm	0.011561216786503792	news	0.020375538617372513	feature	0.014396319165825844
join	0.010496782138943672	document	0.016809877008199692	retrieval	0.012203052639961243
index	0.008885683491826057	sentiment	0.014447927474975586	prediction	0.0093466155230999
time	0.008469320833683014	social	0.014132391661405563	deep	0.008869676850736141
space	0.008365167304873466	report	0.00932223442941904	risk	0.008531135506927967
cost	0.007882383652031422	structured	0.009264552034437656	stock	0.008513355627655983
scheme	0.007588369771838188	extraction	0.008983294479548931	influence	0.008096451871097088
method	0.007451997138559818	information	0.00887338723987341	factor	0.0068464986979961395
performance	0.00681960117071867	relation	0.00843488983809948	character	0.006844753865152597
number	0.006314118858426809	review	0.00843419972807169	node	0.006546159274876118
object	0.006243083626031876	word	0.008123775012791157	method	0.006416665855795145
processing	0.006078030448406935	fake	0.007739062421023846	model	0.006180826108902693
efficient	0.0059316735714674	article	0.007430114317685366	proposed	0.00612914003431797
memory	0.005749688018113375	topic	0.007141975220292807	ensemble	0.006110175047069788
broadcast	0.005190669558942318	sentence	0.007066176738590002	color	0.00599962193518877
search	0.005143202841281891	bot	0.007043770514428616	shape	0.005958943627774715
tree	0.005133297294378281	network	0.00701964320614934	market	0.005945732817053795
indexing	0.005120216868817806	item	0.006892271339893341	ambpm	0.005940482020378113
optimization	0.005066404119133949	emotion	0.006831707898527384	chinese	0.0058461083099246025
acces	0.0050293696112930775	detection	0.006383322644978762	lstm	0.005737783387303352
large	0.004974468145519495	conference	0.006248158868402243	causal	0.0057136318646371365
storage	0.004909100942313671	community	0.006134668365120888	convolution	0.0057066367007792
client	0.004844562150537968	wikipedia	0.006134103983640671	accuracy	0.005659210961312056
proposed	0.004723548423498869	aspect	0.005955767352133989	improved	0.0056411405093967915
workload	0.00471940403804183	opinion	0.005895946174860001	precision	0.005590692162513733
optimal	0.0046027894131839275	company	0.005854287184774876	optimization	0.005589794367551804
neighbor	0.004531306680291891	phrase	0.00573650561273098	hybrid	0.005464000627398491
partition	0.004437506198883057	event	0.005596478004008532	vector	0.005256174132227898
size	0.0044357189908623695	graph	0.005535118747502565	higher	0.0052002971060574055

Topic 12 Word	Topic 12 Probability	Topic 13 Word	Topic 13 Probability	Topic 14 Word	Topic 14 Probability
pattern, clustering, mining, algorithm, cluster		network, trajectory, movement, mobile, metadatum		privacy, security, graph, sensitive, secure	
pattern	0.04012501239776611	network	0.04426883906126022	privacy	0.043933529406785965
clustering	0.039087649434804916	trajectory	0.03506625071167946	security	0.03178683668375015
mining	0.03254592418670654	movement	0.02265305258333683	graph	0.023533867672085762
algorithm	0.02893214114010334	mobile	0.01864652708172798	sensitive	0.012868218123912811
cluster	0.02508391998708248	metadatum	0.018133653327822685	secure	0.01234903559088707
association	0.018570734187960625	community	0.0127710597589612	protection	0.011210495606064796
rule	0.018315255641937256	biological	0.01276656799018383	attack	0.011120060458779335
sequence	0.015066451393067837	sensor	0.012619550339877605	risk	0.009616002440452576
frequent	0.015061773359775543	road	0.012430494651198387	party	0.009529782459139824
itemset	0.01477978378534317	monitoring	0.0122103001922369	law	0.007616607006639242
log	0.01074107363820076	link	0.012145067565143108	subgraph	0.00742353918030858
sequential	0.010110276751220226	lake	0.010579068213701248	private	0.007339798845350742
similarity	0.008260784670710564	node	0.00962376780807972	concern	0.007287631742656231
utility	0.008067422546446323	moving	0.008433501236140728	encryption	0.007260891143232584
fuzzy	0.007525999564677477	user	0.008199093863368034	preserving	0.007240135222673416
discovery	0.007022057194262743	gene	0.008106706663966179	location	0.007208099123090506
outlier	0.006921941414475441	detection	0.00795250479131937	individual	0.006833140272647142
item	0.006643548142164946	prediction	0.0076986257918179035	edge	0.006810133811086416
dataset	0.006471304688602686	mobility	0.00744466669857502	measure	0.006784168537706137
number	0.006452444940805435	behavior	0.0073515139520168304	privacypreserving	0.006737258285284042
time	0.006242801900953054	subscription	0.007239759899675846	protocol	0.006701560225337744
discovering	0.005813592579215765	p2p	0.0069914390332996845	protect	0.006608831230551004
group	0.005678259301930666	robot	0.006962772458791733	disclosure	0.006501012947410345
proposed	0.005578615237027407	device	0.006942398846149445	record	0.006336444057524204
event	0.00545744551345706	damage	0.006662116385996342	method	0.0062460266053676605
synthetic	0.005437242798507214	path	0.006244193762540817	ldiversity	0.006005565635859966
measure	0.005400373600423336	traffic	0.006115816067904234	cloud	0.00585105549544096
discover	0.0049889362417161465	ramification	0.006079619750380516	guarantee	0.005760551895946264
kmean	0.004925738088786602	pattern	0.005694669205695391	requirement	0.00551651744171977
distance	0.004914582706987858	genome	0.005502702668309212	mining	0.005421924404799938

Topic 15 Word	Topic 15 Probability	Topic 16 Word	Topic 16 Probability	Topic 17 Word	Topic 17 Probability
agent, smart, communication, conflict, home		service, workflow, busines, process, organization		relation, dependency, database, fuzzy, logic	
agent	0.03137963265180588	service	0.038119930773973465	relation	0.015764977782964706
smart	0.020424945279955864	workflow	0.034719210118055344	dependency	0.015337018296122551
communication	0.017031751573085785	busines	0.02972768247127533	database	0.01450573280453682
conflict	0.014199359342455864	process	0.016428325325250626	fuzzy	0.013324285857379436
home	0.012573819607496262	organization	0.012453027069568634	logic	0.012944348156452179
obligation	0.0125419357791543	provenance	0.011852714233100414	integrity	0.012625052593648434
resource	0.01251169666647911	product	0.011573217809200287	formula	0.01124099362641573
iot	0.011595280840992928	model	0.010755592957139015	constraint	0.011022173799574375
computer	0.01054268516600132	management	0.009400365874171257	attribute	0.009829831309616566
deontic	0.00976653303951025	protocol	0.008511601015925407	deductive	0.009251202456653118
negotiation	0.008640878833830357	standard	0.007884102873504162	theory	0.009151862002909184
multiagent	0.008258331567049026	project	0.007681113202124834	knowledge	0.00863376259803772
solving	0.008188454434275627	customer	0.007473618257790804	presented	0.00816002395004034
l	0.008017191663384438	collaborative	0.007271705660969019	inference	0.008017025887966156
valuation	0.007982773706316948	team	0.006731591187417507	decision	0.007620277348905802
da	0.007961700670421124	scientific	0.006688272580504417	partwhole	0.0074835121631622314
et	0.007837648503482342	activity	0.0066733830608427525	set	0.007263614796102047
user	0.0076653617434203625	collaboration	0.006496683228760958	default	0.006825986318290234
n	0.007430503610521555	interaction	0.006385591346770525	rule	0.0067983060143888
al	0.007414975203573704	organizational	0.006383875850588083	answer	0.00610564649105072
environment	0.00734639773145318	composition	0.006321979686617851	value	0.0060982233844697475
aging	0.007254927884787321	support	0.006075027398765087	base	0.006014091428369284
logic	0.007069766987115145	company	0.006032876670360565	hierarchy	0.005659247282892466
argument	0.007010572124272585	resource	0.005947393365204334	procedure	0.005590846762061119
dataacces	0.0065806894563138485	failure	0.005711314268410206	consistency	0.005502249114215374
framework	0.006474598776549101	execution	0.005696275271475315	query	0.005224243272095919
action	0.006341734901070595	requirement	0.005659600254148245	predicate	0.005140809342265129
reasoning	0.00622996361926198	contract	0.005657585803419352	given	0.005121896509081125
mapreduce	0.006222008727490902	architecture	0.005645446013659239	functional	0.005107021890580654
inference	0.006088952999562025	actor	0.005541331600397825	stripejoin	0.005021564196795225

Topic 18 Word	Topic 18 Probability	Topic 19 Word	Topic 19 Probability	
transaction, skyline, constraint, rule, update		language, model, schema, database, conceptual		
transaction	0.03647327050566673	language	0.02109631896018982	
skyline	0.02564155124127865	model	0.019263138994574547	
constraint	0.0229797326028347	schema	0.018326640129089355	
rule	0.02244403026998043	database	0.01803925260901451	
update	0.020411325618624687	conceptual	0.017340872436761856	
event	0.01972244493663311	object	0.01562606729567051	
policy	0.0159037783741951	semantic	0.011904650367796421	
control	0.014728951267898083	design	0.010867496952414513	
active	0.01377395261079073	objectoriented	0.01076691783964634	
cardinality	0.012913729064166546	system	0.010374226607382298	
kb	0.01201073918491602	modeling	0.010326466523110867	
acces	0.011085924692451954	specification	0.009730735793709755	
concurrency	0.010408598929643631	constraint	0.00882643274962902	
execution	0.009110258892178535	modelling	0.00865886453539133	
scheduling	0.009109417907893658	transformation	0.0074408999644219875	
object	0.007736836560070515	er	0.007086823228746653	
peer	0.007420544512569904	concept	0.006733824033290148	
propagation	0.007407214026898146	evolution	0.0065980697982013226	
protocol	0.007347702048718929	diagram	0.006272113416343927	
relationship	0.007297413423657417	relationship	0.006259037181735039	
slot	0.0072805327363312244	formal	0.005831596441566944	
change	0.007070524152368307	natural	0.005480275023728609	
cycle	0.007002068217843771	level	0.0053629195317626	
dimension	0.006987536326050758	component	0.005266109947115183	
trigger	0.006682908162474632	type	0.005216678138822317	
database	0.006591349840164185	form	0.005163718946278095	
time	0.006447409745305777	property	0.005100882146507502	
temporal	0.006358415819704533	abstraction	0.005095991306006908	
semantic	0.006166792940348387	uml	0.004861186724156141	
application	0.0059811146929860115	representation	0.004824941977858543	