

1 PageRank

Q.1

At one of these pages: 2,11,21,31 with probability 0.25 each.

Q.2

Website	Probability
1	0.00250
2	0.22750
3	0.00250
4	0.00250
5	0.00250
6	0.00250
7	0.00250
8	0.00250
9	0.00250
10	0.00250
11	0.22750
12	0.00250
13	0.00250
14	0.00250
15	0.00250
16	0.00250
17	0.00250
18	0.00250
19	0.00250
20	0.00250

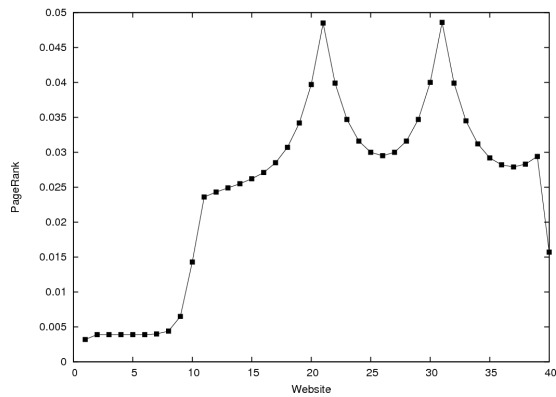
21	0.22750
22	0.00250
23	0.00250
24	0.00250
25	0.00250
26	0.00250
27	0.00250
28	0.00250
29	0.00250
30	0.00250
31	0.22750
32	0.00250
33	0.00250
34	0.00250
35	0.00250
36	0.00250
37	0.00250
38	0.00250
39	0.00250
40	0.00250

Q.3

Website	Probability
1	0.0032
2	0.0039
3	0.0039
4	0.0039
5	0.0039
6	0.0039
7	0.0040
8	0.0044
9	0.0065
10	0.0143
11	0.0236
12	0.0243
13	0.0249
14	0.0255
15	0.0262
16	0.0271
17	0.0285
18	0.0307
19	0.0342
20	0.0397

21	0.0485
22	0.0399
23	0.0347
24	0.0316
25	0.0300
26	0.0295
27	0.0300
28	0.0316
29	0.0347
30	0.0400
31	0.0486
32	0.0399
33	0.0345
34	0.0312
35	0.0292
36	0.0282
37	0.0279
38	0.0283
39	0.0294
40	0.0157

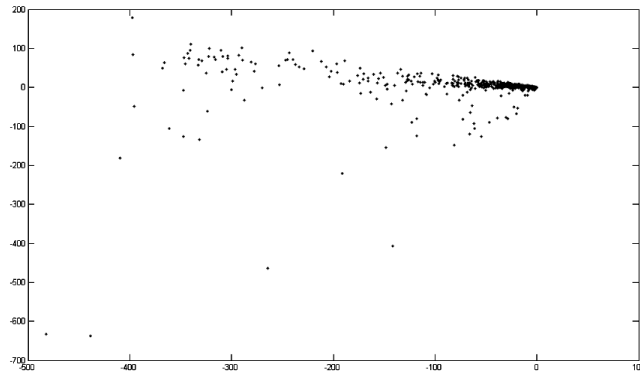
Q.4



Pages 11, 21 and 31 do not have the same ranking. The huge difference between website 11 and the other two is because website 11 has lesser websites pointing to it (1-10 and 12). But websites 21 and 31 are pointed to by 2 of their neighbors, in addition to websites 1-10.

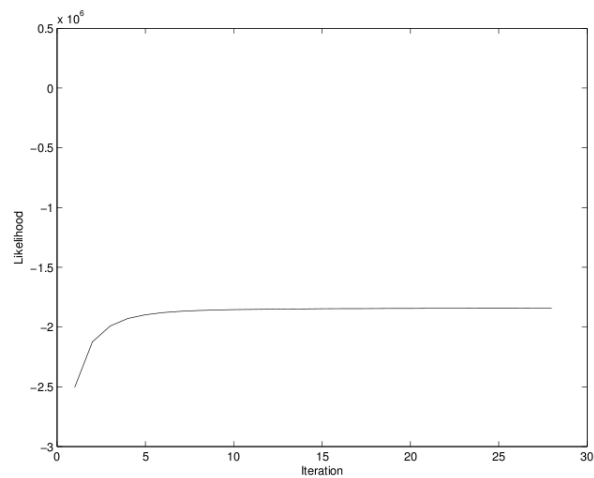
2 Latent Semantic Indexing

Q.5



3 Latent Dirichlet Allocation

Q.6



Q.7

topic 000 function# name# value# days# saved reader index2#html next0 albumloolo web#
topic 001 animation# steps class# more# simulation# theory# ann lame #07 left

topic 002 ##0 ## 5# devoted number# server# client# web# 0000 #p
 topic 003 a# hrs #li braces https #p # ##0 tdata #td
 topic 004 statistics# statistics regular analysis# serious models# model# 30#10 time# methods#
 topic 005 #pdf 2007# optimizations research# discussions g## manipulate m19#29 mining#
 c##
 topic 006 program# wisconsin# parallel#distributed research# abstractfull project# conferences
 abuse paradigm member
 topic 007 head hash hise phi ## movement receives memory# department# sciences#
 topic 008 do# web# someday all# https here# information# not# yours above
 topic 009 cached program# # memory# time# not# #code all# chapters eager
 topic 010 madison# wi# department# 608#262#9777 wisconsin# sciences# photo research# #
 db
 topic 011 # xml#to#sql musical india# yang research# systems# indicate newsletter querying
 topic 012 architecture# systems# research# internet memory# marked davis hills #pdf system#
 topic 013 database# materialized systems# # management# ramakrishnan# minimal querying
 raid photographs
 topic 014 # me# c#s# above introductory a#m science# systems# ignore programming#
 topic 015 database# systems# science# # project# madison# system# c#s# advances introduc-
 tory
 topic 016 class# #2 java# newly #code program# int# #p ignore course
 topic 017 junior 2006# restaurant 297 club creates bbs trailhead out# tend
 topic 018 discussions # #2 homeworks 3# #4 #00 lecturer 9# p#m
 topic 019 homepage# butt not# here# all# do# vector me# soap #
 topic 020 was# ntt # soap pictures# me# butt someday do# here#
 topic 021 me# # ignore here# jimmy newly pleased cs#wisc#eduthe ntt not#
 topic 022 not# ignore yours whatever do# ntt all# willb one# butt
 topic 023 was# willb not# usual one# skier user#defined time# project# image#
 topic 024 006#filtered#jpg 03 008080 0402028006#filtered#jpg 0402028015#filtered#jpg 040207016#fil-
 tered#jpg 040207020#filtered#jpg 040307029#filtered#jpg 040317#011#filtered#jpg 040317#012#fil-
 tered#jpg
 topic 025 ## #t#h#e# adams #t#o# personality ## workload a#m team ntt
 topic 026 me# was# ntt butt no one# class#header old# above firstindexpageurl
 topic 027 research# time# me# school# work# wisconsin# willb was# more# systems#
 topic 028 # list# while one# e#mail someday projects# ghostview programming# was#

topic 029 c#s# a#m research# science# graduated students wisconsin# department# madison# falls

topic 030 variability ## false# #num #2 3# images# function# photoshop parents

topic 031 uw# clicking back# wisconsin# all# madison# other# images# sheboygan nature

topic 032 3#1 image# newly function# speak e# keypresslistener keys next0#src

topic 033 pictures# tend 08 andreae # ridge climbing apr# liu out

topic 034 ##0 ## 5# devoted number# server# client# web# 0000 #p

topic 035 was# davis hoeting butt # partial someday me# cs#wisc#eduthe willb

topic 036 project# room# # usual cs#wisc#eduthe too #kamenick not# design# use#

topic 037 yours browser# web# # ntt supported ignore not# dog butt

topic 038 learning# machine# research# c#s# language# 2007# conferences send artist shaw

topic 039 statistics# stat301 department# falls madison# springer science# r# research# 2007#

topic 040 here# now# there# was# other# # help go# maybe undergrad

topic 041 picture# next0 lastindexpageurl previously firstindexpageurl 07 he cameras canonical attached

topic 042 j2se computing# wisconsin# os#9#68000 m19#29 systems# performance# parallel#distributed madison# #ll

topic 043 class# players project# summary# no lecturer packages willb use# security#

topic 044 https ieee#acm networks# internet# network# 2005# # acoustimass#6 array s01

topic 045 condor#g doc computing# research# information# a1 matchmaking animal integration# semantics

topic 046 dots education wisc#edu c#s# images# paper# #pdf sciences# homepage# 2005#

topic 047 c#s# theory# does algorithms# willb ## course# introductory offices #

topic 048 # hidden contacted here# butt aneesh m# liked me# wanted

topic 049 willb systems# file# system# project# operation disk# yours not# storage#

Q.8

Prof name	Topic No
jerryzhu	38
shavlik	38
miro	45
sohi	12
pb	44