

Communities ID Cards

This document gather the “ID Cards” of the CC communities found within your database.

The CC network was built by keeping a link between articles sharing at least 5 references. The communities characterized here correspond to the ones found in the level 1 (in the sense of the Louvain algo) which gathers more than 0 articles.

These ID cards displays the most frequent keywords, subject categories, journals of publication, institution, countries, authors, references and reference journals of the articles of each community. The significance of an item $\sigma = \sqrt{N}(f - p) / \sqrt{p(1 - p)}$ [where N is the number of articles within the community and f and p are the proportion of articles respectively within the community and within the database displaying that item] is also given (for example $\sigma > 5$ is really highly significant). The tf-idf value which can be calculated by $tf - idf = f * \log(\frac{1}{p})$ is also given.

Table 1: The community 1 - “CALL CENTERS” contains $N = 4$ articles. Its average internal link weight is $\langle \omega_{in} \rangle \simeq 1/3$

Keyword	f(%)	tf-idf
CALL CENTERS	30.56	1.50
STAFFING	13.89	0.70
FINANCIAL SERVICES	12.50	0.70
CONTACT CENTERS	9.72	0.62
SKILL-BASED ROUTING	11.11	0.61
CALL CENTER MANAGEMENT	8.33	0.57
HEURISTICS	9.72	0.49
CONTACT RATES	5.56	0.48
APPLIED OPTIMIZATION	5.56	0.43
QUEUEING	6.94	0.37
MATHEMATICAL MODELING	5.56	0.37
BANKING	6.94	0.35
TIME-DEPENDENT OVERFLOW	4.17	0.33
FINANCIAL SERVICE OPERATIONS	4.17	0.33
QUEUEING MODELS OF CALL CENTERS	4.17	0.33
CUSTOMER RELATIONSHIP MANAGEMENT	4.17	0.32
FLEXIBLE SERVICE RESOURCES	4.17	0.32
DYNAMIC RESOURCE ALLOCATION	4.17	0.32
OVERLAPPING FLEXIBILITY STRUCTURE	4.17	0.32
OPTIMIZATION	5.56	0.31
Subject	f(%)	σ
Operations Research & Management Science	100.00	0.00
Engineering, Manufacturing	54.17	3.54
Management	45.83	-3.54
Journal	f(%)	σ
PROD OPER MANAG	54.17	3.54
M&SOM-MANUF SERV OP	44.44	7.94
J OPER MANAG	1.39	-8.71

Institution	f(%)	σ
COLUMBIA UNIV	9.72	34.96
SCH BUSINESS	9.72	24.59
GRAD SCH BUSINESS	6.94	22.97
NYU	5.56	27.11
UNIV N CAROLINA	5.56	16.67
NORTHWESTERN UNIV	5.56	25.15
KOC UNIV	5.56	51.42
COLL ADM SCI & ECON	5.56	51.42
VRIJE UNIV AMSTERDAM	4.17	45.63
IEOR DEPT	4.17	45.63
DEPT DECIS SCI	4.17	23.96
KELLOGG SCH MANAGEMENT	4.17	24.66
DEPT MATH	4.17	38.55
TEXAS A&M UNIV	2.78	12.72
CARNEGIE MELLON UNIV	2.78	14.39
SAN FRANCISCO STATE UNIV	2.78	30.40
STERN SCH BUSINESS	2.78	16.40
LEONARD N STERN SCH BUSINESS	2.78	22.62
HARVARD UNIV	2.78	13.21
KENAN FLAGLER BUSINESS SCH	2.78	9.53
Country	f(%)	σ
Usa	48.61	31.56
Turkey	5.56	31.99
Canada	5.56	11.39
Netherlands	5.56	18.51
Germany	2.78	14.07
England	1.39	3.80
Singapore	1.39	5.20
Denmark	1.39	19.61
France	1.39	4.66
Chile	1.39	19.61
Author	f(%)	σ
Whitt W	11.11	13.74
Nair SK	9.72	13.10
Mehrotra V	8.33	11.52
Pinedo M	6.94	7.69
Stolletz R	6.94	23.89
Seifert MJ	5.56	22.87
Bollapragada S	5.56	36.32
Meester GA	5.56	22.87
Koole G	5.56	20.13
Zhou YP	5.56	14.43

Reference	f(%)	σ
Gans N, 2003, Manufacturing & Service Operations Management (5), 0	84.72	450.66
Aksin ZN, 2007, PROD OPER MANAG (16), 665	41.67	443.03
Brown L, 2005, J AM STAT ASSOC (100), 36	38.89	243.52
Wallace r B, 2005, Manufacturing & Service Operations Management (7), 0	30.56	259.66
Chevalier P, 2008, PROD OPER MANAG (17), 306	29.17	311.21
Garnett O, 2002, Manufacturing & Service Operations Management (4), 0	26.39	201.10
Avramidis AN, 2004, MANAGE SCI (50), 896	26.39	206.31
Halfin S, 1981, OPER RES (29), 567	26.39	194.03
Borst S, 2004, OPER RES (52), 17	26.39	227.89
Green LV, 2007, PROD OPER MANAG (16), 13	23.61	189.50
Mehrotra V, 2010, PROD OPER MANAG (19), 353	20.83	238.44
Whitt W, 2006, PROD OPER MANAG (15), 88	19.44	177.59
Jongbloed G, 2001, APPL STOCH MODEL BUS (17), 307	19.44	163.37
Whitt W, 1999, OPER RES LETT (24), 205	18.06	147.50
Whitt W, 2006, OPER RES (54), 37	18.06	137.32
Zohar E, 2002, MANAGE SCI (48), 566	18.06	128.03
Harrison j M, 2005, Manufacturing & Service Operations Management (7), 0	18.06	159.55
Chevalier P, 2003, INT J PROD ECON (85), 47	16.67	193.68
Armony M, 2004, OPER RES (52), 527	16.67	131.45
Gans N, 2007, M&SOM-MANUF SERV OP (9), 33	16.67	192.60
Gans N, 2003, OPER RES (51), 255	15.28	133.47
Franx GJ, 2006, PERFORM EVALUATION (63), 799	15.28	187.62
Pinedo ML, 2000, CREATING VALUE FINAN (0), 357	13.89	153.76
Shumsky RA, 2004, OR SPECTRUM (26), 307	13.89	146.77
Bhulai S, 2003, IEEE T AUTOMAT CONTR (48), 1434	13.89	165.66
RefJournal	f(%)	σ
Manufacturing & Service Operations Management	55.56	68.68
MANAGE SCI	52.78	34.76
OPER RES	50.00	46.36
PROD OPER MANAG	41.67	35.18
M&SOM-MANUF SERV OP	27.78	37.64
QUEUEING SYST	25.00	93.36
J AM STAT ASSOC	23.61	71.63
INTERFACES	20.83	31.40
ANN APPL PROBAB	18.06	85.10
J MARKETING	13.89	16.85

Table 2: The community 0 - “STAFFING” contains $N = 1$ articles. Its average internal link weight is $\langle \omega_{in} \rangle \simeq 1/ - 9999$

Keyword	f(%)	tf-idf	Institution	f(%)	σ
STAFFING	31.25	1.58	NYU	18.75	43.29
CALL CENTERS	31.25	1.53	GRAD SCH BUSINESS	18.75	29.41
LOSS MODEL	12.50	1.01	COLUMBIA UNIV	18.75	31.87
BRANCH AND BOUND	12.50	1.01	DEPT DECIS SCI	12.50	34.01
BANKING	18.75	0.96	COLL ADM SCI & ECON	12.50	54.58
REAL-TIME OPTIMIZATION	12.50	0.95	COLL BUSINESS	12.50	14.18
DOUBLY STOCHASTIC PROCESSES	12.50	0.95	SAN FRANCISCO STATE UNIV	12.50	64.60
CALL CENTER OPERATIONS	12.50	0.95	SCH BUSINESS	12.50	14.94
STOCHASTIC CONVEXITY	12.50	0.93	KOC UNIV	12.50	54.58
UNOBSERVABLE QUEUES	12.50	0.93	LEONARD N STERN SCH BUSINESS	12.50	48.13
SAMPLE PATH CONVEXITY	12.50	0.93	STANFORD UNIV	12.50	24.01
RENEGING	12.50	0.88	UNIV CONNECTICUT	6.25	24.04
INTEGER PROGRAMMING	12.50	0.87	DEPT MANAGEMENT SCI	6.25	10.56
BALKING	12.50	0.86	SIMON GRAD SCH BUSINESS	6.25	41.69
CROSS-TRAINING	12.50	0.86	SACHS & CO	6.25	72.24
CALL CENTER MANAGEMENT	12.50	0.85	OPIM DEPT	6.25	41.69
WORKFORCE SCHEDULING	12.50	0.85	IEOR DEPT	6.25	32.28
FLUID MODELS	12.50	0.84	UNIV PENN	6.25	11.96
TIME-VARYING DEMAND	12.50	0.82	DEPT IND ENGN & OPERAT RES	6.25	13.58
QUEUES WITH TIME-VARYING ARRIVAL RATE	12.50	0.82	DEPT INFORMAT OPERAT & MANAGEMENT SCI	6.25	36.10
Subject	f(%)	σ	Country	f(%)	σ
Operations Research & Management Science	100.00	0.00	Usa	56.25	17.30
Engineering, Manufacturing	62.50	2.37	Turkey	12.50	34.01
Management	37.50	-2.37	Belgium	6.25	21.74
Journal	f(%)	σ	Author	f(%)	σ
PROD OPER MANAG	62.50	2.37	Whitt W	18.75	11.11
M&SOM-MANUF SERV OP	37.50	2.92	Mehrotra V	18.75	12.52
			Armony M	18.75	12.56
			Green LV	12.50	9.58
			Peter JKE	12.50	13.11
			Ozlu O	12.50	22.22
			Plambeck E	12.50	20.56
			Seshadri S	12.50	7.01
			Chevalier P	12.50	28.85
			Tezcan T	12.50	21.96

Reference	f(%)	σ
Harrison j M, 2005, Manufacturing & Service Operations Management (7), 0	81.25	338.60
Gans N, 2003, Manufacturing & Service Operations Management (5), 0	81.25	203.73
Whitt W, 2006, PROD OPER MANAG (15), 88	81.25	349.93
Brown L, 2005, J AM STAT ASSOC (100), 36	68.75	202.98
Whitt W, 2006, OPER RES (54), 37	50.00	179.33
Wallace r B, 2005, Manufacturing & Service Operations Management (7), 0	50.00	200.33
Garnett O, 2002, Manufacturing & Service Operations Management (4), 0	43.75	157.20
Avramidis AN, 2004, MANAGE SCI (50), 896	43.75	161.27
Whitt W, 1999, OPER RES LETT (24), 205	43.75	168.54
Bassamboo A, 2006, OPER RES (54), 419	43.75	211.91
Borst S, 2004, OPER RES (52), 17	37.50	152.68
Whitt W, 2005, MANAGE SCI (51), 221	37.50	181.23
Whitt W, 2006, OPER RES (54), 247	31.25	169.79
Halfin S, 1981, OPER RES (29), 567	31.25	108.33
Green LV, 2001, OPER RES (49), 549	31.25	149.55
Armony M, 2004, OPER RES (52), 271	31.25	148.75
Green LV, 2007, PROD OPER MANAG (16), 13	31.25	118.24
Jongbloed G, 2001, APPL STOCH MODEL BUS (17), 307	31.25	123.79
Zeltyn S, 2005, QUEUEING SYST (51), 361	31.25	153.40
Whitt W, 2002, STOCHASTIC PROCESS L (0), 0	31.25	174.97
Zohar E, 2002, MANAGE SCI (48), 566	25.00	83.58
Chevalier P, 2003, INT J PROD ECON (85), 47	25.00	136.97
Jennings OB, 1996, MANAGE SCI (42), 1383	25.00	121.61
Whitt W, 2004, OPER RES (52), 922	25.00	125.30
Shumsky RA, 2004, OR SPECTRUM (26), 307	25.00	124.56
RefJournal	f(%)	σ
Manufacturing & Service Operations Management	68.75	40.13
OPER RES	68.75	30.18
MANAGE SCI	62.50	19.50
PROD OPER MANAG	62.50	25.08
QUEUEING SYST	56.25	99.13
J AM STAT ASSOC	50.00	71.64
ANN APPL PROBAB	43.75	97.31
EUR J OPER RES	31.25	15.11
OPER RES LETT	31.25	42.20
OR SPECTRUM	31.25	61.02

Table 3: The community 2 - “CALL CENTERS” contains $N = 1$ articles. Its average internal link weight is $< \omega_{in} > \simeq 1/ - 9999$

Keyword	f(%)	tf-idf	Institution	f(%)	σ
CALL CENTERS	27.27	1.34	COLUMBIA UNIV	27.27	54.42
STAFFING	22.73	1.15	SCH BUSINESS	13.64	19.13
SKILL-BASED ROUTING	18.18	1.00	DEPT DECIS SCI	9.09	28.98
TIME-VARYING ARRIVAL RATES	13.64	0.96	NYU	9.09	24.57
FINANCIAL SERVICES	13.64	0.76	GRAD SCH BUSINESS	9.09	16.66
LOSS MODEL	9.09	0.74	IEOR DEPT	9.09	55.08
BRANCH AND BOUND	9.09	0.74	DEPT IND ENGN & OPERAT RES	9.09	23.21
QUEUEING MODELS OF CALL CENTERS	9.09	0.73	SAN FRANCISCO STATE UNIV	9.09	55.08
FINANCIAL SERVICE OPERATIONS	9.09	0.73	COLL BUSINESS	9.09	12.05
TIME-DEPENDENT OVERFLOW	9.09	0.73	LEONARD N STERN SCH BUSINESS	9.09	41.03
APPLIED OPTIMIZATION	9.09	0.71	UNIV CONNECTICUT	4.55	20.49
ASSIGNMENT PROBLEM	9.09	0.69	DEPT MANAGEMENT SCI	4.55	8.98
PREFERENCE-BASED ROUTING	9.09	0.69	PFIZER PHARMACEUT INC	4.55	61.60
VALUE-BASED ROUTING	9.09	0.69	ARCHSTONE CONSULTING	4.55	61.60
CUSTOMER CONTACT CENTERS	9.09	0.69	EDMONTON	4.55	27.52
TURNOVER	9.09	0.69	GOLDMAN SACHS ASSET MANAGEMENT	4.55	61.60
TELEPHONE CALL CENTERS	9.09	0.63	DEPT STAT & OPERAT RES	4.55	21.74
CHURN	9.09	0.63	GEORGIA INST TECHNOL	4.55	7.77
CROSS-TRAINING	9.09	0.62	HSCH SPARKASSEN FINANZGRP	4.55	61.60
CALL CENTER MANAGEMENT	9.09	0.62	TECH UNIV DENMARK	4.55	61.60
Subject	f(%)	σ	Country	f(%)	σ
Operations Research & Management Science	100.00	0.00	Usa	63.64	23.03
Engineering, Manufacturing	77.27	4.24	Turkey	4.55	14.46
Management	22.73	-4.24	Canada	4.55	5.12
			Netherlands	4.55	8.35
			Denmark	4.55	35.55
			Germany	4.55	12.77
			Belgium	4.55	18.53
Journal	f(%)	σ	Author	f(%)	σ
PROD OPER MANAG	77.27	4.24	Whitt W	27.27	19.09
M&SOM-MANUF SERV OP	22.73	1.36	Mehrotra V	13.64	10.60
			Van Den schriek JC	9.09	24.58
			Mehrotra A	9.09	20.75
			Aksin ZN	9.09	8.16
			Barth W	9.09	23.22
			Manitz M	9.09	23.22
			Chevalier P	9.09	24.58
			Sisselman ME	9.09	18.48
			Natarajan HP	9.09	20.75
Reference	f(%)	σ			
Green LV, 2007, PROD OPER MANAG (16), 13	72.73	322.75			
Gans N, 2003, Manufacturing & Service Operations Management (5), 0	72.73	213.83			
Wallace r B, 2005, Manufacturing & Service Operations Management (7), 0	72.73	341.70			
Halfin S, 1981, OPER RES (29), 567	40.91	166.30			
Aksin ZN, 2007, PROD OPER MANAG (16), 665	40.91	240.44			
Brown L, 2005, J AM STAT ASSOC (100), 36	40.91	141.61			
Chevalier P, 2003, INT J PROD ECON (85), 47	36.36	233.63			
Borst S, 2004, OPER RES (52), 17	31.82	151.90			
Avramidis AN, 2004, MANAGE SCI (50), 896	31.82	137.52			
Whitt W, 2006, OPER RES (54), 37	31.82	133.80			
Whitt W, 2006, PROD OPER MANAG (15), 88	31.82	160.66			
Gans N, 2007, M&SOM-MANUF SERV OP (9), 33	31.82	203.28			
Garnett O, 2002, Manufacturing & Service Operations Management (4), 0	27.27	114.89			
Harrison j M, 2005, Manufacturing & Service Operations Management (7), 0	27.27	133.24			
Jongbloed G, 2001, APPL STOCH MODEL BUS (17), 307	27.27	126.68			
Franx GJ, 2006, PERFORM EVALUATION (63), 799	27.27	185.16			
Witt LA, 2004, J MANAGE (30), 149	27.27	180.66			
Gans N, 2003, OPER RES (51), 255	27.27	131.74			
Whitt W, 2006, OPER RES (54), 247	22.73	144.78			
Jennings OB, 1996, MANAGE SCI (42), 1383	22.73	129.64			
Whitt W, 2004, OPER RES (52), 922	22.73	133.56			
Shumsky RA, 2004, OR SPECTRUM (26), 307	22.73	132.78			
Armony M, 2004, OPER RES (52), 527	22.73	99.10			
Green LV, 2001, OPER RES (49), 549	22.73	127.52			
Whitt W, 2004, MANAGE SCI (50), 1449	22.73	133.41			
RefJournal	f(%)	σ			
PROD OPER MANAG	77.27	36.46			
OPER RES	72.73	37.47			
MANAGE SCI	68.18	25.00			
Manufacturing & Service Operations Management	63.64	43.53			
M&SOM-MANUF SERV OP	45.45	34.23			
QUEUEING SYST	40.91	84.51			
INTERFACES	36.36	30.49			
ANN APPL PROBAB	36.36	94.83			
J AM STAT ASSOC	36.36	61.06			
ANN OPER RES	31.82	50.38			