

# CSIndexbr in a Nutshell

[csindexbr.org](http://csindexbr.org)

Marco Tulio Valente

ASERG/DCC/UFMG

# Requirements

- Transparency
- Openness
- Quantitative data
- Internacional relevance
- Organization by research area

# Comparing with CSRankings

	1st tier	2nd tier
Journals	CSIndexbr	CSIndexbr
Conferências	CSRankings CSIndexbr	CSIndexbr

# Manually curated data

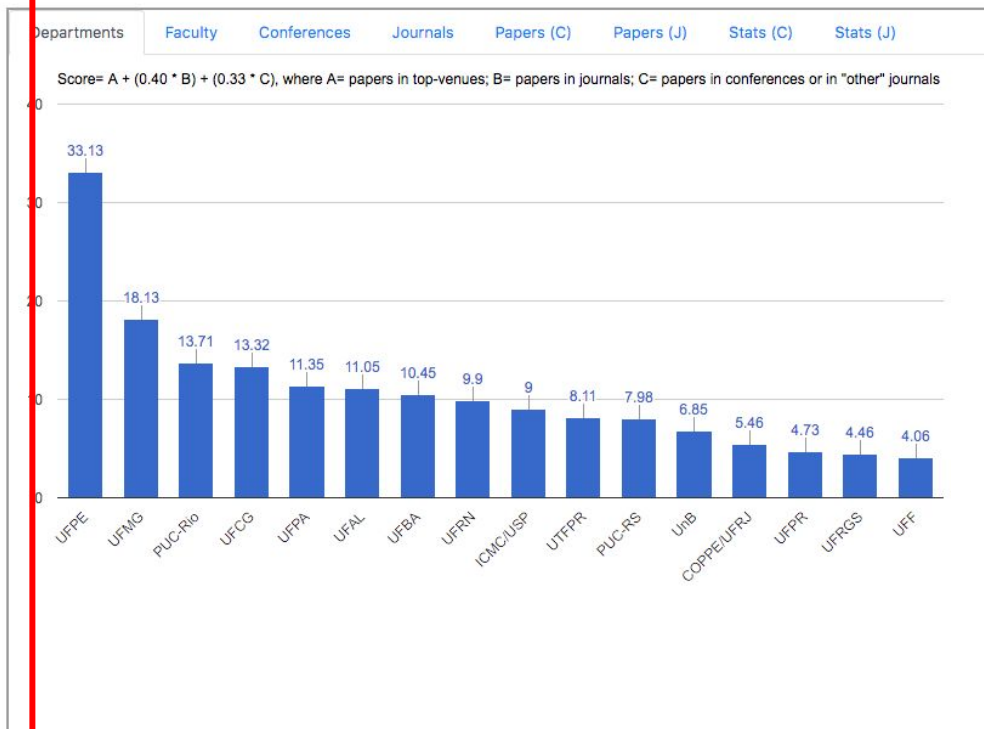
# (1) List with 1,200+ Brazilian CS researchers

<https://github.com/aserg-ufmg/CSIndex/blob/master/data/all-researchers.csv>

## (2) List with 21 CS subareas

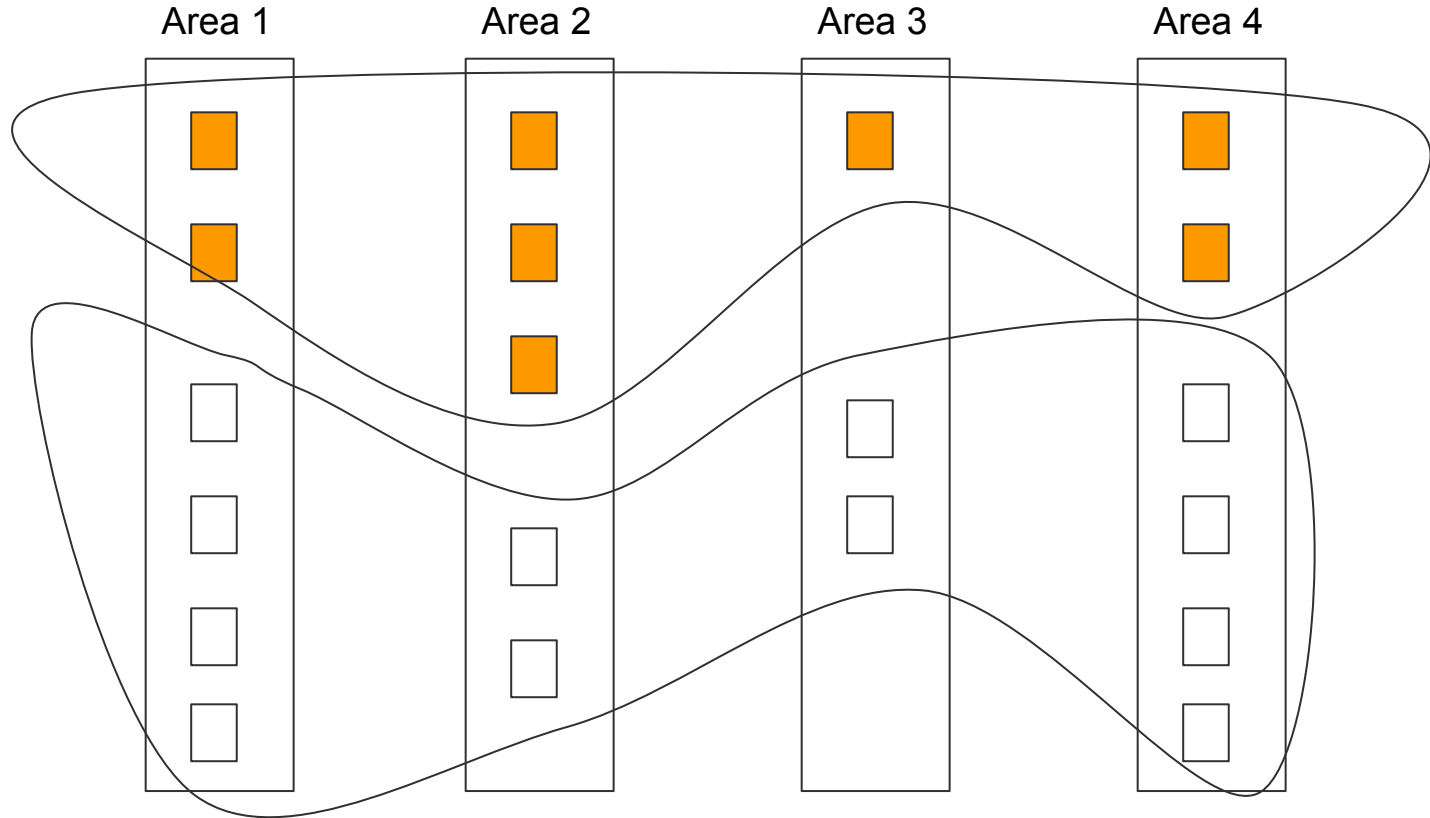
### ☒ Software Engineering

- ☐ Programming Languages
- ☐ Human-Computer Interaction
- ☐ Computer Networks
- ☐ Distributed Systems
- ☐ Computer Architecture & HPC
- ☐ Hardware Design
- ☐ Databases & Inf. Systems
- ☐ Web & Information Retrieval
- ☐ Data Mining & Mach. Learning
- ☐ Artificial Intelligence
- ☐ Algorithms & Complexity
- ☐ Formal Methods & Logic
- ☐ Operational Research
- ☐ Security & Cryptography
- ☐ Computer Vision
- ☐ Comp. Graphics & Multimedia
- ☐ Robotics
- ☐ CS Education
- ☐ Bioinformatics & Comp. Bio.
- ☐ Computer Science (General)



(3) List with 1st/2nd tier journal/conferences  
187 confs and 190 journals

# Equivalence classes across research areas



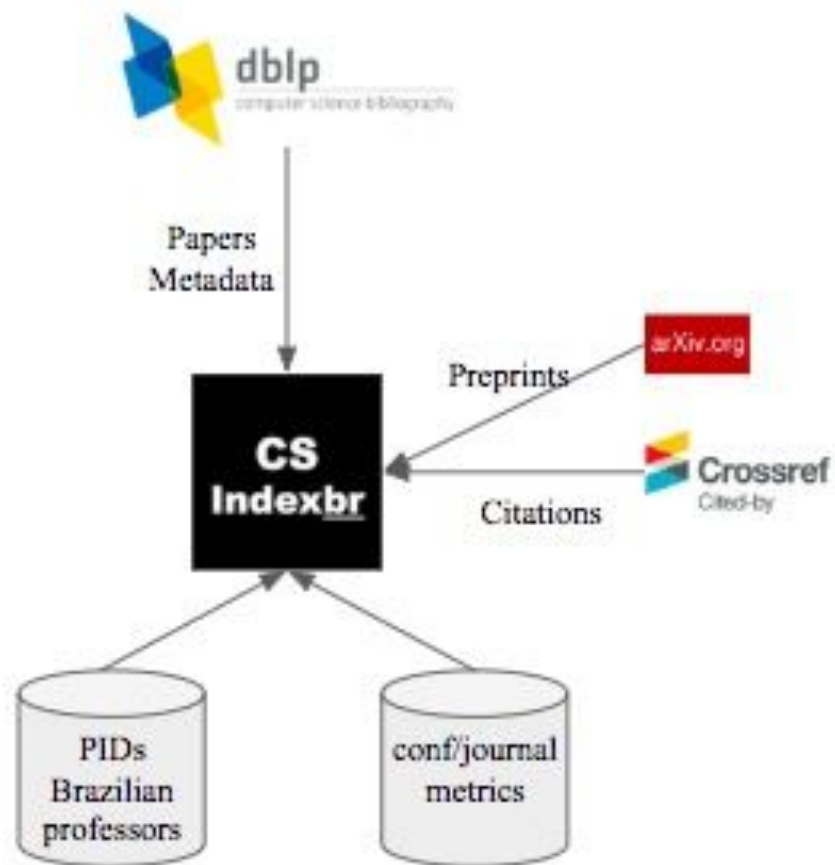


# Metrics about each indexed journal/conf

(with borderline cases in yellow)

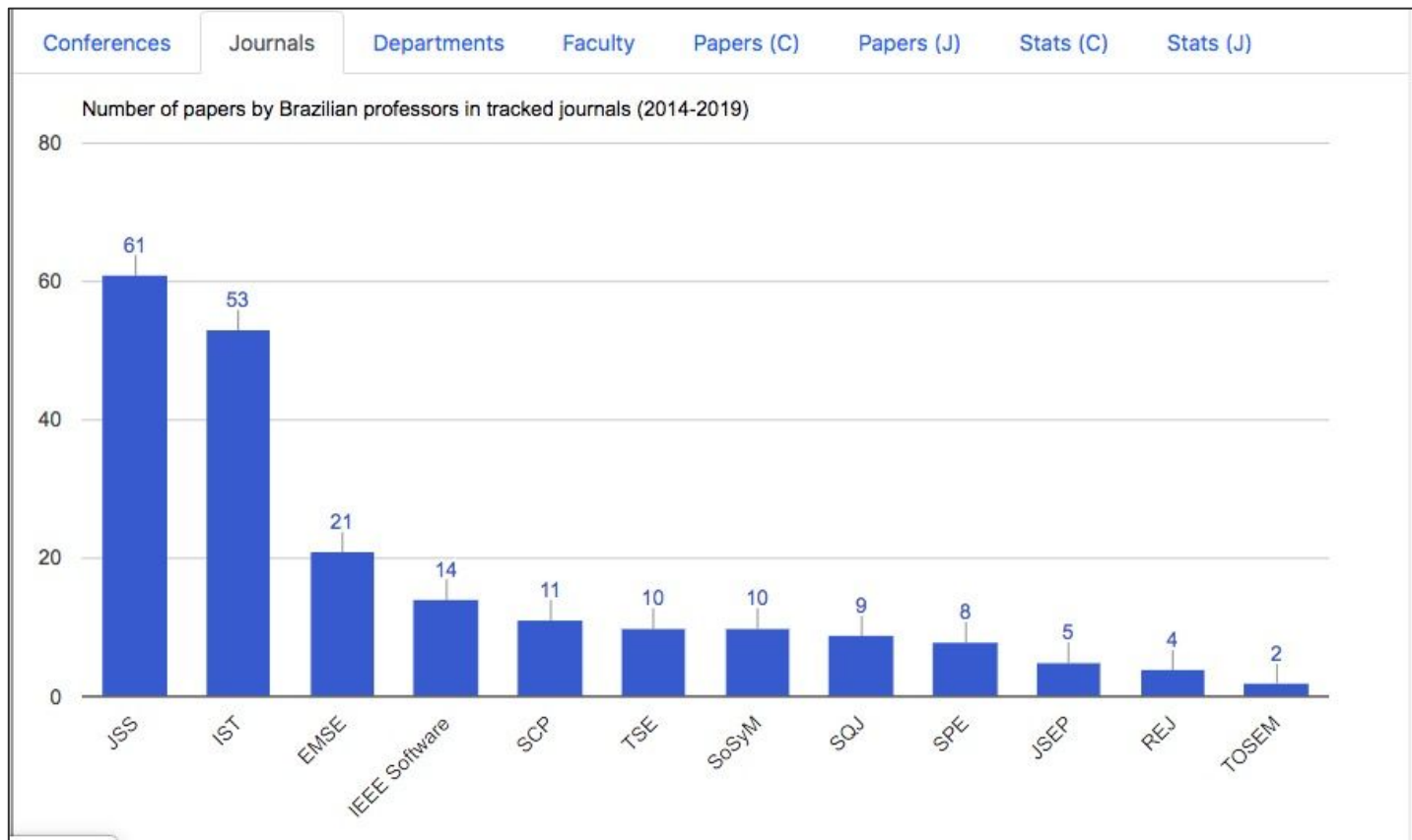
	Conference	Sponsor	Submitted	Accepted (2017)	Rate	h5-index	Norm h5	Rank	Pages
1	ICSE	ACM SIGSOFT/IEEE CS	415	68	16.4	68	1	top	12
2	FSE	ACM SIGSOFT	295	72	24.4	43	0.6	top	12
3	ASE	ACM SIGSOFT/IEEE CS	314	65	20.7	31	0.48	top	12
4	MSR	ACM SIGSOFT/IEEE CS	121	37	30.6	39	1.05		12
5	ISSTA	ACM SIGSOFT	118	31	26.3	31	1		12
6	ICSME	IEEE CS	150	42	28	29	0.69		12
7	ICST	IEEE CS	135	36	26.7	29	0.81		12
8	MODELS	ACM SIGSOFT/IEEE CS	68	17	25	26	1.53		11
9	SANER	IEEE CS	135	34	25.2	26	0.76		12
10	SPLC	-	49	15	30.6	25	1.67		10
11	RE	IEEE CS	96	27	28.1	23	0.85		10
12	FASE	ETAPS	91	25	27.5	23	0.92		17
13	ICPC	IEEE CS	83	28	33.7	21	0.75		12
14	ESEM	ACM SIGSOFT/IEEE CS	109	21	19.3	20	0.95		10
15	ICSA	IEEE	95	21	22.1	16	0.76		10

Implementation based on public APIs

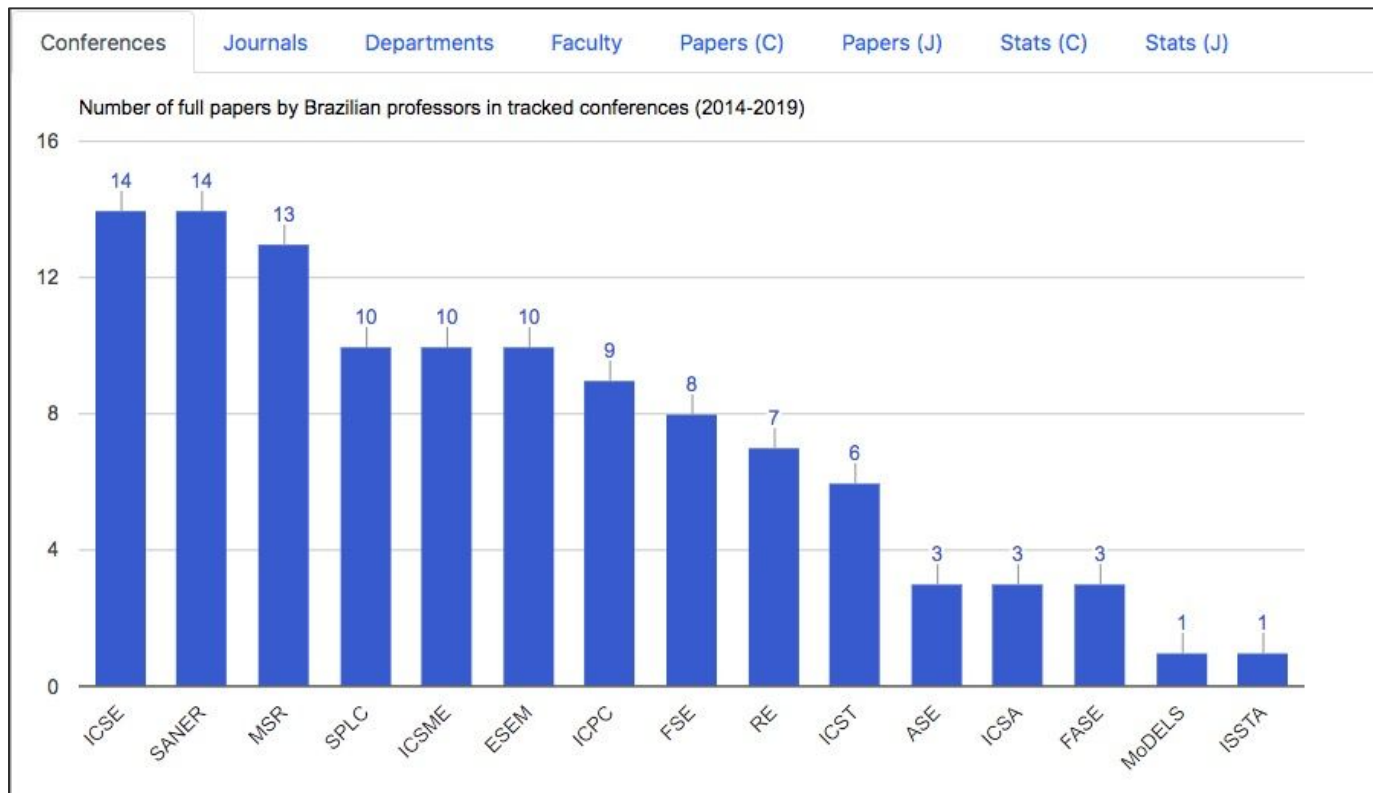


# Screenshots

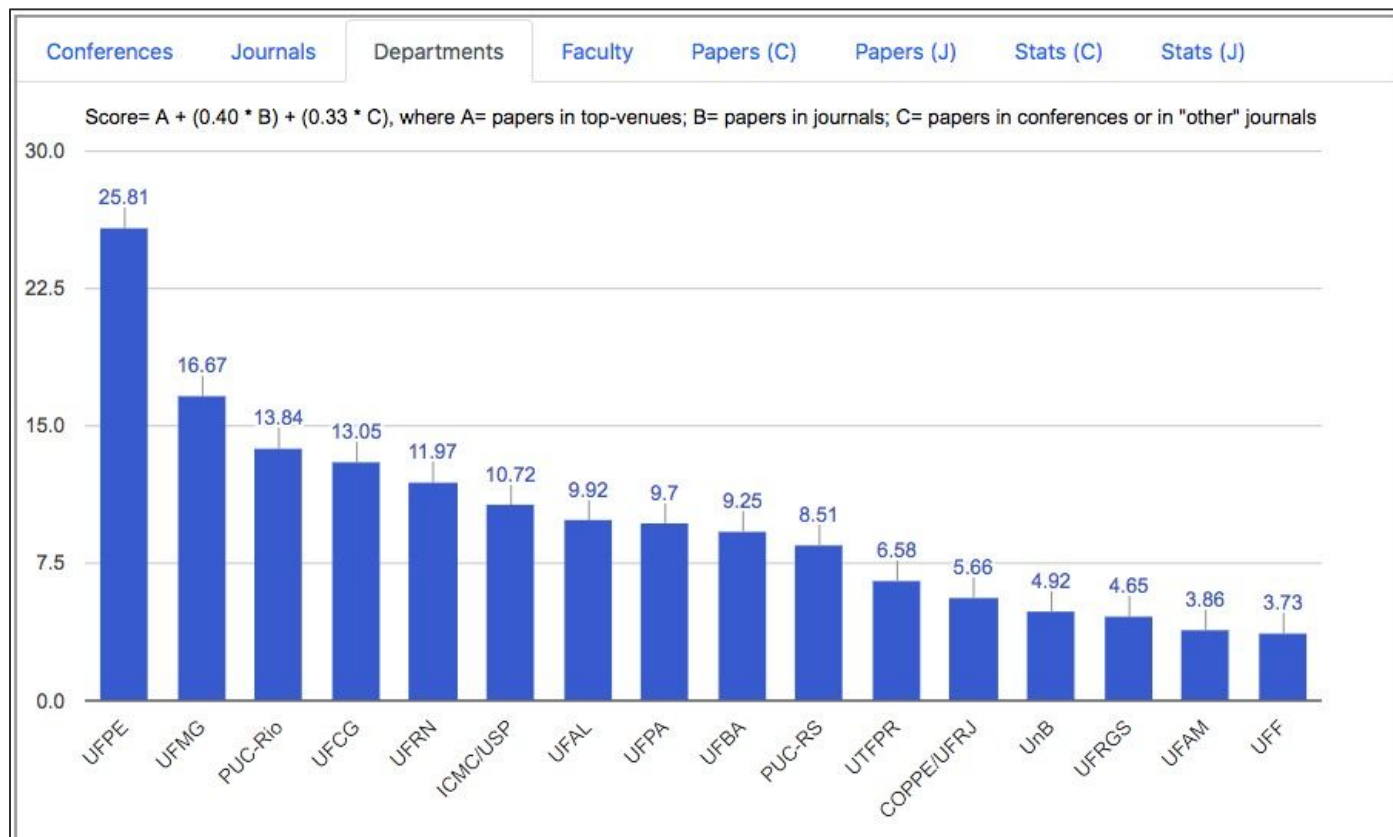
# Papers / Journal [always in the last 5 yrs]



# Papers / Conference [always in the last 5 yrs]



# Dept Rankings: per Research Area



# Detailed metadata on all indexed papers

Conferences		Journals	Departments	Faculty	Papers (C)	Papers (J)	Stats (C)	Stats (J)
Year	Venue	Title		Depts	Authors		Citations	
1	2018	ESEM	Building a collaborative culture: a grounded theory of well succeeded devops adoption in practice. <a href="#">[doi]</a> <a href="#">[arxiv]</a>	UFPA; UnB	Welder Pinheiro Luz; Gustavo Pinto 0001; Rodrigo Bonifácio		1	
2	2018	ESEM	Identifying unmaintained projects in github. <a href="#">[doi]</a> <a href="#">[arxiv]</a>	UFMG	Jailton Coelho; Marco Tulio Valente; Luciana Lourdes Silva; Emad Shihab		0	
3	2018	ICPC	Analysis of test log information through interactive visualizations. <a href="#">[doi]</a>	IME/RJ	Diego Castro; Marcelo Schots		0	
4	2018	ICPC	How do design decisions affect the distribution of software metrics? <a href="#">[doi]</a>	UFBA	Marcos Dósea; Cláudio Sant'Anna; Bruno Carreiro da Silva		0	
5	2018	ICSE	★ Almost there: a study on quasi-contributors in open source software projects. <a href="#">[doi]</a>	UFPA; UTFPR	Igor Steinmacher; Gustavo Pinto 0001; Igor Scaliante Wiese; Marco Aurélio Gerosa		0	
6	2018	ICSE	★ Assessing the threat of untracked changes in software evolution. <a href="#">[doi]</a>	UFMG	André C. Hora; Danilo Silva; Marco Tulio Valente; Romain Robbes		1	
7	2018	ICSE	★ Enlightened debugging. <a href="#">[doi]</a>	UFPE	Xiangyu Li; Shaowei Zhu; Marcelo d'Amorim; Alessandro Orso		0	



# Faculty with Papers (in a Research Area)

Conferences	Journals	Departments	Faculty	Papers (C)	Papers (J)	Stats (C)	Stats (J)
Brazilian Professors (with papers in the area)							Department
1	Adenilso Simao						ICMC/USP
2	Alessandro Garcia						PUC-Rio
3	Alexandre Plastino						UFF
4	Alexandre Vasconcelos						UFPE
5	Alfredo Goldman						IME/USP
6	Ana de Melo						IME/USP
7	Andre Hora						UFMG
8	Andre Santos						UFPE
9	Andreia Malucelli						PUC-PR
10	Arilo Dias Neto						UFAM
11	Arnaldo Moura						UNICAMP
12	Augusto Sampaio						UFPE
13	Auri Vincenzi						UFSCAR
14	Avelino Zorzo						PUC-RS
15	Baldoino Fonseca						UFAL
16	Bruno Cafeo						UFMS
17	Bruno Cartaxo						IFPE
18	Bruno Feijo						PUC-Rio

# Author Pages

## Marco Tulio Valente (UFMG)

32 papers; 4 top-papers (★); 233 citations (since 2014)

		Venue	Year	Title/Authors	Citations
1	C	ESEM	2018	<b>Identifying unmaintained projects in github.</b> Jailton Coelho; Marco Tulio Valente; Luciana Lourdes Silva; Emad Shihab <a href="#">[doi]</a> <a href="#">[arxiv]</a>	0
2	C	ICSE	2018 ★	<b>Assessing the threat of untracked changes in software evolution.</b> André C. Hora; Danilo Silva; Marco Tulio Valente; Romain Robbes <a href="#">[doi]</a>	1
3	J	IEEE Software	2018	<b>AngularJS Performance: A Survey Study.</b> Miguel Ramos; Marco Tulio Valente; Ricardo Terra <a href="#">[doi]</a> <a href="#">[arxiv]</a>	0
4	J	JSS	2018	<b>On the use of replacement messages in API deprecation: An empirical study.</b> Gleison Brito; André C. Hora; Marco Tulio Valente; Romain Robbes <a href="#">[doi]</a>	1
5	J	JSS	2018	<b>JMove: A novel heuristic and tool to detect move method refactoring opportunities.</b> Ricardo Terra; Marco Tulio Valente; Sergio Miranda; Vitor Sales <a href="#">[doi]</a>	1
6	J	JSS	2018	<b>What's in a GitHub Star? Understanding Repository Starring Practices in a Social Coding Platform.</b> Hudson Borges; Marco Tulio Valente <a href="#">[doi]</a> <a href="#">[arxiv]</a>	0
7	C	SANER	2018	<b>Why and how Java developers break APIs.</b> Aline Brito; Laerte Xavier; André C. Hora; Marco Tulio Valente <a href="#">[doi]</a> <a href="#">[arxiv]</a>	1
8	J	SQJ	2018	<b>How do developers react to API evolution? A large-scale empirical study.</b> André C. Hora; Romain Robbes; Marco Tulio Valente; Nicolas Anquetil; Anne Etien; Stéphane Ducasse <a href="#">[doi]</a>	1
9	C	FSE	2017 ★	<b>Why modern open source projects fail.</b> Jailton Coelho; Marco Tulio Valente <a href="#">[doi]</a> <a href="#">[arxiv]</a>	10

CSIndexbr is also a  
GOTO Ranking  
(gotorankings.org)

## Viewpoint

# GOTO Rankings Considered Helpful\*

*Seeking to improve rankings by utilizing more  
objective data and meaningful metrics.*

**R**ANKINGS ARE A fact of life. Whether or not one likes them (a previous *Communications* editorial argued we should eschew rankings altogether<sup>1</sup>), they exist and are influential. Within academia, and in computer science in particular, rankings not only capture our attention but also widely influence people who have a limited understanding of computing science research, including prospective students, university administrators, and policy-makers. In short, rankings matter.

Today, academic departments are mostly ranked by for-profit enterprises. The people doing the ranking are not computer scientists, and typically have very little understanding of our field. For example, *U.S. News and World Report*, in ranking Ph.D. programs in sub-areas of computer science inaccurately describes the characteristics of research in the area of “Programming Language” [sic] (see Figure 1).

This lack of understanding of the



# Thanks!

[csindexbr.org](http://csindexbr.org)