

# Submission Data for 2020-2021 CORE conference Ranking process Foundations of Software Science and Computational Structures

Andrew Pitts

# **Conference Details**

### Conference

Title: Foundations of Software Science and Computational Structures Acronym : FOSSACS Rank: A

# **Data and Metrics**

#### **Google Scholar Metrics**

h5-index: 20sub-category url: https://scholar.google.com/citations?hl=en&view\_op=search\_venues&vq=FoSSaCS&btnG=position in sub-category: 20+Image of top 20:

# Top publications

Categories I

es Engineering & Computer Science

Theoretical Computer Science

1.ACM Symposium on Theory of Computing§3852.IEEE Symposium on Foundations of Computer Science (FOCS)§4783.ACM SIAM Symposium on Discrete Algorithms49654.SIAM Journal on Computing45695.Journal of the ACM (JACM)38576.Theoretical Computer Science32527.International Colloquium on Automata, Languages and Programming (ICALP)32428.Conference on Innovations in Theoretical Computer Science314410.IEEE Symposium on Logic in Computer Science314411.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae224114.Logical Methods in Computer Science223615.Journal of Automated Reasoning263516.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms263320.Journal of Logic and Computation2533		Publication	<u>h5-index</u>	<u>h5-median</u>
3.ACM SIAM Symposium on Discrete Algorithms49654.SIAM Journal on Computing45695.Journal of the ACM (JACM)38576.Theoretical Computer Science32527.International Colloquium on Automata, Languages and Programming (ICALP)32428.Conference on Innovations in Theoretical Computer Science31459.Journal of Computer and System Sciences314410.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Algorithms263418.Random Structures & Algorithms263419.European Symposium on Algorithms2634	1.	ACM Symposium on Theory of Computing	<u>63</u>	85
4.SIAM Journal on Computing45695.Journal of the ACM (JACM)38576.Theoretical Computer Science37527.International Colloquium on Automata, Languages and Programming (ICALP)32428.Conference on Innovations in Theoretical Computer Science31459.Journal of Computer and System Sciences314410.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263418.Random Structures & Algorithms263419.European Symposium on Algorithms2634	2.	IEEE Symposium on Foundations of Computer Science (FOCS)	<u>54</u>	78
5.Journal of the ACM (JACM)32576.Theoretical Computer Science37527.International Colloquium on Automata, Languages and Programming (ICALP)32428.Conference on Innovations in Theoretical Computer Science31459.Journal of Computer and System Sciences314410.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263418.Random Structures & Algorithms263419.European Symposium on Algorithms2634	3.	ACM SIAM Symposium on Discrete Algorithms	<u>49</u>	65
A. Horreference of the end o	4.	SIAM Journal on Computing	<u>45</u>	69
7.International Colloquium on Automata, Languages and Programming (ICALP)32428.Conference on Innovations in Theoretical Computer Science31459.Journal of Computer and System Sciences314410.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	5.	Journal of the ACM (JACM)	38	57
8.Conference on Innovations in Theoretical Computer Science31459.Journal of Computer and System Sciences314410.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	6.	Theoretical Computer Science	37	52
9.Journal of Computer and System Sciences314410.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	7.	International Colloquium on Automata, Languages and Programming (ICALP)	32	42
10.IEEE Symposium on Logic in Computer Science314011.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	8.	Conference on Innovations in Theoretical Computer Science	<u>31</u>	45
11.ACM Transactions on Algorithms (TALG)283712.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	9.	Journal of Computer and System Sciences	<u>31</u>	44
12.Algorithmica283513.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	10.	IEEE Symposium on Logic in Computer Science	<u>31</u>	40
13.Fundamenta Informaticae274114.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	11.	ACM Transactions on Algorithms (TALG)	<u>28</u>	37
14.Logical Methods in Computer Science273615.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	12.	Algorithmica	28	35
15.Journal of Automated Reasoning264316.Information Processing Letters263517.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	13.	Fundamenta Informaticae	27	41
16.     Information Processing Letters     26     35       17.     Information and Computation     26     34       18.     Random Structures & Algorithms     26     34       19.     European Symposium on Algorithms     26     33	14.	Logical Methods in Computer Science	27	36
17.Information and Computation263418.Random Structures & Algorithms263419.European Symposium on Algorithms2633	15.	Journal of Automated Reasoning	<u>26</u>	43
18.     Random Structures & Algorithms     26     34       19.     European Symposium on Algorithms     26     33	16.	Information Processing Letters	26	35
19.   European Symposium on Algorithms   26   33	17.	Information and Computation	<u>26</u>	34
	18.	Random Structures & Algorithms	<u>26</u>	34
20.Journal of Logic and Computation2533	19.	European Symposium on Algorithms	<u>26</u>	33
	20.	Journal of Logic and Computation	<u>25</u>	33

Dates and citation counts are estimated and are determined automatically by a computer program.

Help Privacy Terms

# Aminer Rank

Not Listed in Aminer

# **Other Rankings**

Not aware of any other Rankings Conferences in area:

# **Top People Publishing Here**

name: Moshe Y. Vardi

justification: Google Scholar h = 110 https://scholar.google.co.uk/citations?hl=en&user=DQaARsgAAAAJ Very high profile in Logic and Computation ; https://www.cs.rice.edu/~vardi/short-bio.html; General Chair of Federated Logic Conferences (FLOC)

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	0	1	0

Attendance: OCCASIONALLY

name: Nobuko Yoshida

justification: Google Scholar h = 56 https://scholar.google.co.uk/citations?user=4T-p76AAAAAJ&hl=en&oi=ao Member of the Program Committee in 2011.

Paper counts:

Ν	Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
	0	0	1	1	1

Attendance: ALWAYS

name: Javier Esparza

justification: Google Scholar h = 52 https://scholar.google.co.uk/citations?user=c9qgPSYAAAAJ&hl=en&oi=ao Co-chair of the 2017 conference.

Member of the Conference Steering Committee 2018-2025

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	0	0	0	0
Attendance: OF	TEN			

name: Dexter Kozen

justification: Google Scholar h = 55 https://scholar.google.co.uk/citations?user=LV1qWjgAAAAJ&hl=en&oi=ao Member of the Program Committee in 2019 and 2021

PC chair of FOCS (1988), LICS (1995), MFPS (2013)

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	0	0	1

Attendance: SOMETIMES

name: Orna Kupferman

justification: Google Scholar h = 50 https://scholar.google.co.uk/citations?user=5o111aIAAAAJ&hl=en&oi=ao Member of the Program Committee in 2019

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	0	0	0	0

Attendance: SOMETIMES

name: Christel Baier

justification: Google Scholar h = 50 https://scholar.google.co.uk/citations?user=p8sX7r0AAAAJ&hl=en&oi=ao Co-chair of the 2018 conference.

Member of the Program Committee in 2017

Member of the Conference Steering Committee 2016-2021

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	0	1	0

Attendance: OFTEN

name: Bart Jacobs

justification: Google Scholar h = 46 https://scholar.google.co.uk/citations?user=c2b9xloAAAAJ&hl=en&oi=ao Co-chair of the 2016 conference

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	1	0	0

Attendance: SOMETIMES

name: Rob J. van Glabbeek

# justification: Google Scholar h = 45 https://scholar.google.co.uk/citations?user=Ngf21nIAAAAJ&hl=en&oi=ao Member of the Program Committee in 2021

# Recipient of the 2020 CONCUR test-of-time award

### Paper counts:

	aper eeuner					
	Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:	
	0	0	1	1	0	
Attendance: OFTEN						
name: Patricia Bouyer						
justification: Google Scholar h = 43 https://scholar.google.co.uk/citations?user=sgKO-H4AAAAJ&hl=en&oi=ao						

Co-chair of the 2022 conference

PC Chair of LICS 2019

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	0	1	1	2

Attendance: OFTEN

name: Helmut Seidl

justification: Google Scholar h = 40 https://scholar.google.co.uk/citations?user=cWGEU94AAAAJ&hl=en&oi=ao Chair of the 2007 conference

#### Paper counts:

Most F	Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
(	0	0	1	0	0
Attendance: SOMETIMES					

# Where People Publish

# Top People Report

Method of selection: The FOSSACS conference covers several areas of FoR 4613 (Theory of Computation) and to a much lesser extent areas of FoR 4612 (Software engineering). Key words relating to the conference topics were used to search Google Scholar profiles, omitting the deceased and retired, and sorting by h-index and primary research interest. The searches used:

https://scholar.google.co.uk/citations?hl=en&view\_op=search\_authors&mauthors=label%3Alogic\_in\_computer\_science+OR+ label%3Alogic\_and\_computation&btnG=

https://scholar.google.co.uk/citations?hl=en&view\_op=search\_authors&mauthors=label%3Aautomata\_theory+OR+label% 3Aautomata&btnG=

https://scholar.google.co.uk/citations?hl=en&view\_op=search\_authors&mauthors=label%3Atype\_theory+OR+label%3Atype\_ systems&btnG=

https://scholar.google.co.uk/citations?hl=en&view\_op=search\_authors&mauthors=label%3Aconcurrency\_theory&btnG= https://scholar.google.co.uk/citations?hl=en&view\_op=search\_authors&mauthors=label%3Aprogramming++label% 3Asemantics&btnG=

Keyword: automata\_theory automata logic\_in\_computer\_science logic\_and\_computation type\_theory type\_systems concurrency\_theory programming++semantics

name	h-index	gscholar url
Moshe Y. Vardi	110	https://scholar.google.co.uk/citations?hl=en&user=DQaARsgAAAAJ
Ian Horrocks	97	https://scholar.google.co.uk/citations?hl=en&user=OypdmcYAAAAJ
Rajeev Alur	90	https://scholar.google.co.uk/citations?hl=en&user=kWnv_YkAAAAJ
Philip Wadler	72	https://scholar.google.co.uk/citations?hl=en&user=Iz-3VFQAAAAJ
Joost-Pieter Katoen	68	https://scholar.google.co.uk/citations?hl=en&user=yjjO5_oAAAAJ
Frank Pfenning	65	https://scholar.google.co.uk/citations?hl=en&user=ghWKWBUAAAAJ
Benjamin C. Pierce	64	https://scholar.google.co.uk/citations?hl=en&user=2kkddhOAAAAJ
Frank Wolter	63	https://scholar.google.co.uk/citations?hl=en&user=A6cSqMUAAAAJ
Franz Baader	62	https://scholar.google.co.uk/citations?hl=en&user=dIVc_FYAAAAJ
Gordon Plotkin	61	https://scholar.google.co.uk/citations?hl=en&user=OKiEfGcAAAAJ
Carsten Lutz	59	https://scholar.google.co.uk/citations?hl=en&user=xcsp66oAAAAJ
Dexter Kozen	55	https://scholar.google.co.uk/citations?hl=en&user=LV1qWjgAAAAJ
Javier Esparza	52	https://scholar.google.co.uk/citations?hl=en&user=c9qgPSYAAAAJ
Greg Morrisett	51	https://scholar.google.co.uk/citations?hl=en&user=Dswus94AAAAJ
Christel Baier	50	https://scholar.google.co.uk/citations?hl=en&user=p8sX7rOAAAAJ
Orna Kupferman	50	https://scholar.google.co.uk/citations?hl=en&user=5o111aIAAAAJ
Ahmed Bouajjani	48	https://scholar.google.co.uk/citations?hl=en&user=ia9cRMwAAAAJ
Steve Zdancewic	48	https://scholar.google.co.uk/citations?hl=en&user=19kNRUOAAAAJ
Lars Birkedal	46	https://scholar.google.co.uk/citations?hl=en&user=1rW-biOAAAAJ
Rob van Glabbeek	45	https://scholar.google.co.uk/citations?hl=en&user=Ngf21nIAAAAJ

Reference item:  $\$  7. Foundations of Software Science and Computation Structure (FoSSaCS) Core Rank: A

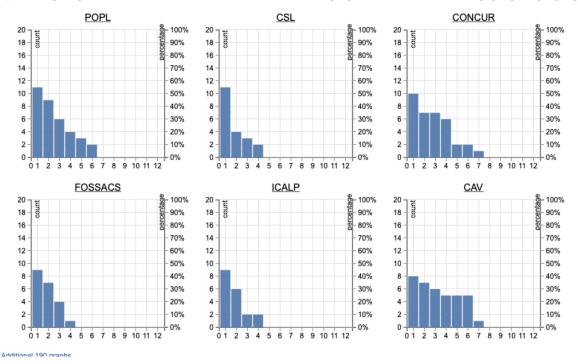
\_\_\_\_\_

This conference was published at 24 times by 9 of 20 experts in the last 11 years.

The experts that publish at this conference are: Lars Birkedal(5), Orna Kupferman(5), Javier Esparza(1), Gordon D. Plotkin(2), Moshe Y. Vardi(3), Christel Baier(2), Rob J. van Glabbeek(3), Frank Pfenning(2), Dexter Kozen(1)

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In 2010, there were 1 publications by 1 experts: Lars Birkedal
In 2011, there were 3 publications by 2 experts: Lars Birkedal, Orna Kupferman
In 2012, there were 3 publications by 3 experts: Moshe Y. Vardi, Rob J. van Glabbeek, Frank Pfenning
In 2013, there were 2 publications by 2 experts: Orna Kupferman, Christel Baier
In 2014, there were 4 publications by 3 experts: Javier Esparza, Orna Kupferman, Moshe Y. Vardi
In 2015, there were 4 publications by 3 experts: Lars Birkedal, Frank Pfenning, Gordon D. Plotkin
In 2016, there were 2 publications by 2 experts: Lars Birkedal, Gordon D. Plotkin
In 2017, there were 1 publications by 1 experts: Dexter Kozen
In 2018, there were 2 publications by 2 experts: Moshe Y. Vardi, Rob J. van Glabbeek
In 2019, there were 2 publications by 2 experts: Christel Baier, Rob J. van Glabbeek
```

```
9 out of the 20 experts published at this conference in 1 or more years
7 out of the 20 experts published at this conference in 2 or more years
4 out of the 20 experts published at this conference in 3 or more years
1 out of the 20 experts published at this conference in 4 or more years WPP Report:
http://portal.core.edu.au/core/media/conf_rank_report/extra_info1792_top_people_report.txt
Graphs: http://portal.core.edu.au/core/media/conf_rank_graphs/extra_info1792_top_people_graph.png
```



### **Other Information**

### **Other Relvant Info**

Other relevant information: FOUNDATIONS OF SOFTWARE SCIENCE AND COMPUTATIONAL STRUCTURES (FOSSACS) i http://portal.core.edu.au/conf-ranks/547/ ¿

D1. OTHER RELEVANT INFORMATION

Additional information for FOSSACS, whose rank is proposed to change from A to B based on limited comparator data supplied by another conference (ICECCS).

This additional information is submitted by the FOSSACS Steering Committee Chair, Andrew Pitts.

There are three pieces of information, (A) (B) and (C), in decreasing order of importance.

"It's h5 is 20 which is low for a SE A conference"

<sup>(</sup>A) At the time the comparator data was supplied, FOSSACS was listed in CORE 2020 as only in FoR 4612 (Software engineering). This is incorrect: FOSSACS should have primary FoR 4613 (Theory of computation) and secondary FoR 4612. This correction has been accepted by CORE and the 2020 listing for FOSSACS now shows the correct FoR information. The Committee report j4612FOSSACS.txt; says:

However, it is NOT low for a ToC (4613) rank A conference: CORE 2020 contains the following FoR=4613 conferences with lower h5 than FOSSACS that are to remain rank A after the current revision:

APPROX (h=19) RANDOM (h5=19) MFCS (h5=18) ITP (h5=18) LPAR (h5=17) ISAAC (h5=14) ICPO (h5=14) WG (h5=13) GD (h5=13) This is very strong evidence that FOSSACS should remain rank A.

For conferences that accept a large number of submissions, it is much easier to have a high h5-index. See for instance the following discussion:

https://medium.com/@csindexbr/normalized-h5-index-of-computer-science-conferences-bde2385fcbce

FOSSACS occupies the same intellectual space and has many authors in common with the conferences ICALP (CORE rank A, h5=32) and LICS (CORE rank A\*, h5=31). However, it accepts less than half the number of submissions as LICS and less than a quarter than ICALP (the acceptance numbers for the latest available year 2020, are 31 for FOSSACS, 69 for LICS and 138 for ICALP). The "normalized h5" figures using the year 2020 are:

FOSSACS = 0.65 LICS = 0.44 ICALP = 0.23

This is further evidence that FOSSACS should be ranked A at least.

1. File: i http://portal.core.edu.au/core/media/conf\_submissions\_spc\_file/FoSSaCS.txt ¿

uses 24 members of the FOSSACS 2020 Program Committee as its sources of "Top (Senior) Program Committee Members", but leaves out its two chairs, Barbara KÃűnig (Universitat Duisburg-Essen, Germany) and Jean Goubault-Larrecq (ENS Paris-Saclay, France). Thus that file should have contained the details of 26 people.

2. H-index-plot j http://portal.core.edu.au/core/media/conf\_submissions\_hindex\_plots/hindex\_buckets\_904.png; only plots 23 of the total of 26 possible h-indices

3. WPP Report | http://portal.core.edu.au/core/media/conf\_rank\_report/comparator904\_spc\_report.txt;

selects 7 people from the H-index-plot (Amr Sabry, Nick Benton, Michele Boreale, Parosh Aziz Abdulla, Thorsten Altenkirch, Xavier Leroy, Prakash Panangaden). This leaves out the expert with the highest h-index (Leonid Libkin) and uses instead one (Amr Sabry) whose h-index is much lower (rank 11 among the 26 members of the PC by h index).

As as result of these three errors, the Committee report ¡4612FOSSACS.txt¿ says:

"The median h-index of the PC is 15, with 8 of 23 PC members being established researchers." whereas in fact:

(a) The median SCOPUS h-index of the FOSSACS 2020 PC is 17, not 15  $\,$ 

(b) Since a PC member with h=18 was selected as one of the 7 "experts" in the submission data, one may assume that people with h at least 18 count as "established researchers". There are 12 such people, not 8.

[Note that since the full submission form is not available for this call for additional information, we were not able to correct the "Top (Senior) Program Committee" data ourselves. However, we have supplied complete B5 and C1 data.]

Year 2019 General Chair Name: Jan Kofron Affiliation: Charles University, Czech Republic Gender: M H Index: 12 GScholar url: https://scholar.google.cz/citations?user=Q551wNIAAAAJ&hl=en DBLP url: https://dblp.org/pid/05/4356.html Year 2018 General Chair Name: Panagiotis Katsaros Affiliation: Aristotle University of Thessaloniki, Greece Gender: M H Index: 20 GScholar url: https://scholar.google.com/citations?user=IF0oXd8AAAAJ&hl=en DBLP url: https://dblp.org/pid/20/2927.html Year 2017 General Chair Name: Parosh Aziz Abdulla Affiliation: Uppsala University, Uppsala, Sweden. Gender: M H Index: 47 GScholar url: https://scholar.google.com/citations?user=ClHyW9MAAAAJ&hl=en DBLP url: https://dblp.org/pid/a/PAAbdulla.html

# Attachments

N/A

### Proposers

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### Submitted By

Name: Pitts Andrew Email: andrew.pitts@cl.cam.ac.uk