



**Submission Data for 2020-2021 CORE conference Ranking process
International Joint Conference on Automated Reasoning**

Franz Baader, Viorica Sofronie-Stokkermans

Conference Details

Conference

Title: International Joint Conference on Automated Reasoning

Acronym : IJCAR

Rank: A*

Requested Rank

Rank: A*

Recent Years

Proceedings Publishing Style

Proceedings Publishing: series

Link to most recent proceedings: <https://link.springer.com/conference/ijcar>

Further details: The proceedings are published in Springer Lecture Notes in Computer Science (LNCS) subseries Lecture Notes in Artificial Intelligence (LNAI).

The proceedings usually contain regular papers and system descriptions accepted at the main conference. (IJCAR 2020 also contained a small number of short papers, which were clearly marked as short papers.)

Most Recent Years

Most Recent Year

Year: 2018

URL: <http://ijcar2018.org>

Location: Oxford, UK

Papers submitted: 108

Papers published: 46

Acceptance rate: 43

Source for numbers: <http://ijcar.org//conferences>

General Chairs

Name: Ian Horrocks

Affiliation: University of Oxford, UK

Gender: M

H Index: 96

GScholar url: <https://scholar.google.com/citations?hl=en&user=OypdmcYAAAAJ>

DBLP url: <https://dblp.org/pid/h/IanHorrocks.html>

Program Chairs

Name: Didier Galmiche

Affiliation: Université de Lorraine, France

Gender: M

H Index: 19 (according to Semantic Scholar)

GScholar url: https://scholar.google.com/scholar?hl=de&as_sdt=0%2C5&q=Didier+Galmiche&oq=

DBLP url: <https://dblp.org/pid/82/76.html>

Second Most Recent Year

Year: 2016

URL: <https://www.uc.pt/en/congressos/ijcar2016>

Location: Coimbra, Portugal

Papers submitted: 79

Papers published: 35

Acceptance rate: 44

Source for numbers: <http://ijcar.org//conferences>

General Chairs

Name: Pedro Quaresma

Affiliation: University of Coimbra, Portugal

Gender: M

H Index: 11

GScholar url: <https://scholar.google.com/citations?user=2sWg6gMAAAAJ&hl=en>

DBLP url: <https://dblp.org/pid/71/4599.html>

Program Chairs

Name: Nicola Olivetti

Affiliation: Aix-Marseille University, France

Gender: M

H Index: 29

GScholar url: <https://scholar.google.com/scholar?q=Nicola+Olivetti&hl=en>

DBLP url: <https://dblp.org/pid/o/NicolaOlivetti.html>

Third Most Recent Year

Year: 2014

URL: <https://cs.nyu.edu/ijcar2014/>

Location: Vienna, Austria

Papers submitted: 83

Papers published: 37

Acceptance rate: 45

Source for numbers: <http://ijcar.org//conferences>

General Chairs

Name: Christian Fermüller

Affiliation: Vienna University of Technology

Gender: M

H Index: 28

GScholar url: <https://scholar.google.com/citations?hl=en&user=-6IV5oIAAAAJ>

DBLP url: <https://dblp.org/pid/f/CGFermuller.html>

Program Chairs

Name: Stéphane Demri

Affiliation: LSV, CNRS & ENS Paris-Saclay, France

Gender: M

H Index: 28

GScholar url: https://scholar.google.com/scholar?hl=de&as_sdt=0%2C5&q=Stephane+Demri&btnG=

DBLP url: <https://dblp.org/pid/d/StephaneDemri.html>

Policies

Chair Selection: Time, location, and conference chairs are selected based on proposals sent in by prospective conference chairs and local organizers. The IJCAR steering committee is responsible for issuing a call for proposals early enough so that a decision on the time and location can be taken well in advance of the next IJCAR (usually at least 18 months before the meeting).

Candidates for PC co-chairs are usually nominated by the constituent meetings after a discussion in their SCs, but additional candidates can be nominated by members of the IJCAR SC. The nominated candidates are then discussed in the IJCAR SC, and a set of PC co-chairs is proposed to the constituent meetings for approval. This process is iterated until an agreement is reached.

Usually, IJCAR will have two PC co-chairs, but having one PC chair or three co-chairs is also possible. There should not be more than three PC co-chairs.

Members of the IJCAR SC cannot be candidates for a PC co-chair position. Members of the SC of a constituent meeting are eligible, but they cannot be nominated by their own meeting. In exceptional cases, the conference chair may also be nominated as a PC co-chair.

Previous IJCAR PC co-chairs cannot be nominated, but previous PC chairs of constituent meetings are eligible. For meetings with

formally published proceedings, they should not have held this position too recently (not within the last 5 years) whereas there is no restriction for meetings without such proceedings.

Policy name: ACM Code of Ethics and Professional Conduct

Policy url: <https://www.acm.org/code-of-ethics>

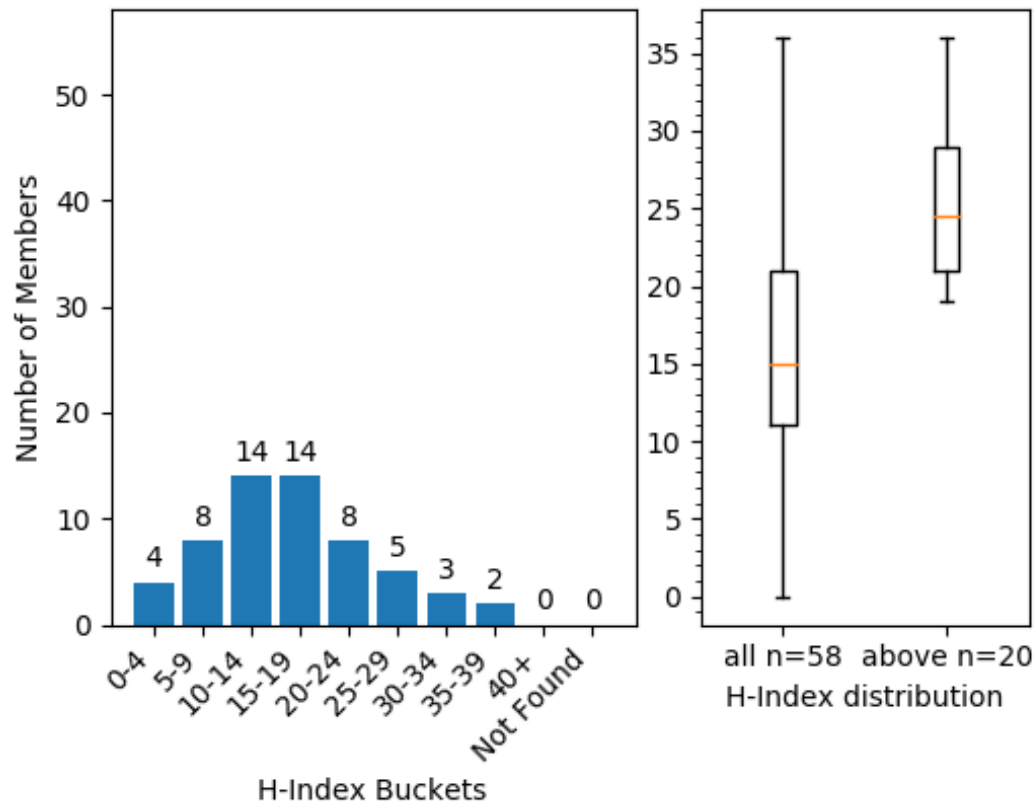
(Senior) Program Committee

Link to (s)pc: <https://ijcar2020.org/committees/>

File: http://portal.core.edu.au/core/media/conf_submissions_spc_file/IJCAR-2020-PC_wC9m7Bc.txt

H-index plot: http://portal.core.edu.au/core/media/conf_submissions_hindex_plots/hindex_buckets_1698.png

Information Contained within this graph is derived using the Elsevier Scopus Database 2021.



Data and Metrics

Google Scholar Metrics

Sub-category url: https://scholar.google.com.au/citations?view_op=top_venues&hl=en&vq=eng_theoreticalcomputerscience

Position in sub-category: 20+

Image of top 20: http://portal.core.edu.au/core/media/changes_h5/higherrank1698_gscholar_minh5.png

Top publications

Categories > Engineering & Computer Science > Theoretical Computer Science

	Publication	<u>h5-index</u>	<u>h5-median</u>
1.	ACM Symposium on Theory of Computing	63	85
2.	IEEE Symposium on Foundations of Computer Science (FOCS)	54	78
3.	ACM SIAM Symposium on Discrete Algorithms	49	65
4.	SIAM Journal on Computing	45	69
5.	Journal of the ACM (JACM)	38	57
6.	Theoretical Computer Science	37	52
7.	International Colloquium on Automata, Languages and Programming (ICALP)	32	42
8.	Conference on Innovations in Theoretical Computer Science	31	45
9.	Journal of Computer and System Sciences	31	44
10.	IEEE Symposium on Logic in Computer Science	31	40
11.	ACM Transactions on Algorithms (TALG)	28	37
12.	Algorithmica	28	35
13.	Fundamenta Informaticae	27	41
14.	Logical Methods in Computer Science	27	36
15.	Journal of Automated Reasoning	26	43
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
20.	Journal of Logic and Computation	25	33

No Google Scholar h5 index available for this conference

Potential reason for no h5 index: We were not able to find the google scholar h5-index for IJCAR. (In Aminer the h5-index is indicated as 23 (for IJCAR and CADE). One of the reasons can be that DBLP lists both IJCAR and CADE under the same url.

(See also comments in F), Section 2 on the Google Scholar Metrics Rank.)

ACM Metrics

Not Sponsored by ACM

Aminer Rank

Aminer rank: 10

Aminer name: Conference on Automated Deduction/The International Joint Conference on Automated Reasoning

Acronym / shortname: CADE/IJCAR

h-5 index: 23

CCF level:

THU level:

Top Aminer Cites: http://portal.core.edu.au/core/media/conf_submissions_citations/higherrank1698_aminer_top_cite.pdf

Other Rankings

Not aware of any other Rankings

Conferences in area: IJCAR and CADE

LPAR, JELIA and ITP

FroCoS and Tableaux

Top People Publishing Here

name: Franz Baader

justification: Major contributions in the area of automated deduction (especially term rewriting and unification theory) and knowledge representation (especially description logics and modal logics). EurAI Fellow, Herbrand Award 2020.

h-index: 62

Paper counts:

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

Attendance: ALWAYS

name: Jasmin Blanchette

justification: Research focus: using first-order automatic theorem provers and model finders to find proofs and counterexamples in higher-order logic (Sledgehammer, Nitpick, Nunchaku, and Matryoshka). Development of foundational definitional mechanisms for (co)datatypes and (co)recursive functions.

Starting with 1.1.2021: Editor in Chief of the Journal of Automated Reasoning.

h-index: 25

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	3	2	1	0

Attendance: ALWAYS

name: Leonardo de Moura

justification: Major contribution to automated reasoning, theorem proving, decision procedures, SAT and SMT.

As a principal researcher at Microsoft, he showed that automated deduction can successfully be used in industry.

The main architect of the theorem prover Lean, of the SMT solvers Z3 and Yices 1.0, and of SAL (the Symbolic Analysis Laboratory) a tool suite that includes symbolic and bounded model checkers, and automatic test generators.

Numerous awards among which: - the Herbrand Award (2019), - the Skolem Award (2017) for the paper "Efficient E-Matching for SMT Solvers" that has passed the test of time; - 2014: The most influential tool paper in the first 20 years of TACAS for the paper: "Z3: An Efficient SMT Solver." - Programming Languages Software Award for Z3 (2015).

h-index: 43

Paper counts:

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

Attendance: ALWAYS

name: Marijn Heule

justification: The focus of his research is on solving hard combinatorial problems in areas such as formal verification, number theory, and extreme combinatorics. Very successful in obtaining resp. validating computer proofs for open problems in mathematics.

Numerous best paper awards as co-author of papers in IJCAR 2020, 2018, CADE 2017, HVC 2017, 2011, TACAS 2017, SAT 2016.

h-index: 30

Paper counts:

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

Attendance: ALWAYS

name: Deepak Kapur

justification: Major contributions in the areas of automated reasoning, term rewriting, formal methods, program analysis, algebraic and geometric reasoning, elimination methods, resultants and constraint solving.

He was an Editor in Chief of the Journal of Automated Reasoning (1993-2007). Herbrand Award (2009)

h-index: 54

Paper counts:

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

Attendance: ALWAYS

name: Tobias Nipkow

justification: Major contributions to the area of automated theorem proving and especially interactive theorem proving; one of the main forces behind the theorem prover Isabelle (together with Lawrence Paulson).

Until 31.12.2020: Editor in Chief of the Journal of Automated Reasoning.

h-index: 51

Paper counts:

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

Attendance: OFTEN

name: Lawrence Paulson

justification: Major contributions in the area of automated theorem proving and its applications; development of the theorem prover Isabelle (together with Tobias Nipkow), MetiTarski, an automatic prover for the elementary functions; research on formalising mathematics, including Gödel's incompleteness theorems and constructible universe; proving the correctness of security protocols.

- Herbrand Award (2017) - 2017: Fellow of the Royal Society - 2008: ACM Fellow

h-index: 53

Paper counts:

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

Attendance: OFTEN

name: Cesare Tinelli

justification: Major contributions to the area of Satisfiability modulo theories (SMT), one of the initiators of the SMT-LIB initiative, which was created with the expectation that the availability of common standards and a library of benchmarks would greatly facilitate the evaluation and the comparison of SMT systems.

h-index: 42

Paper counts:

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

Attendance: ALWAYS

name: Josef Urban

justification: Research focus on automated deductive reasoning (automated theorem proving), inductive reasoning (machine learning and discovery) and their combining; and in the formalization and computer-verification of mathematics.

h-index: 35

Paper counts:

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

Attendance: ALWAYS

name: Andrei Voronkov

justification: Major contributions to the areas of logic and automated reasoning. Main designer of the theorem prover Vampire which won numerous awards at the CASC competitions.

Herbrand Award (2015)

Paper counts:

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

Attendance: ALWAYS

Where People Publish

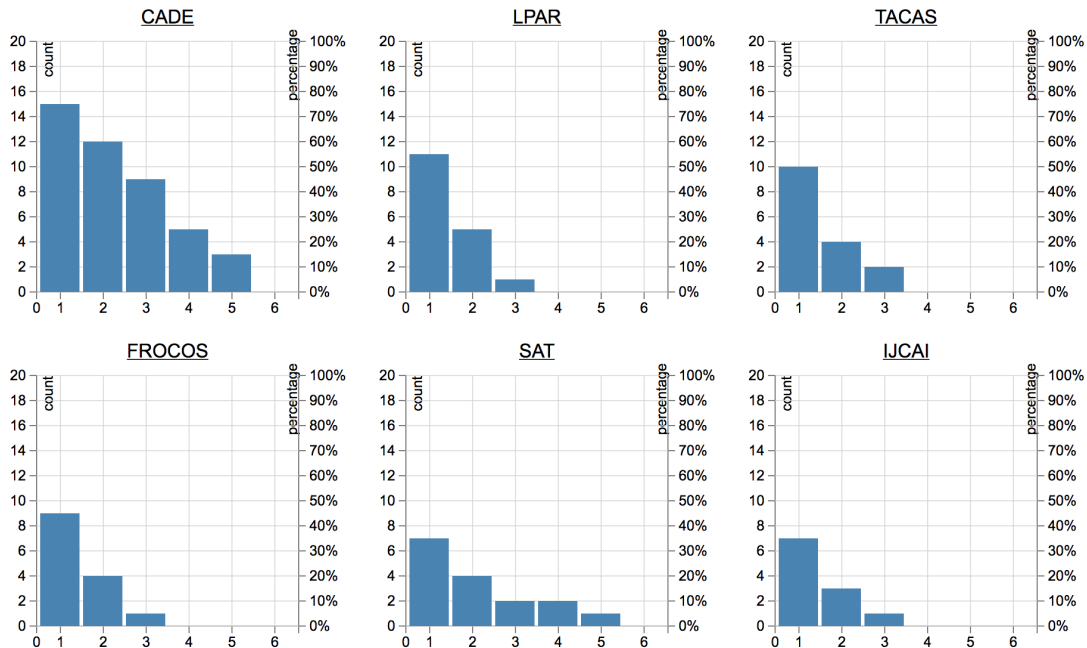
Top (Senior) Program Committee Members

Generated Report Name: conf_submissions_top_spc/higherrank1698_top_spc.csv

WPP Report: http://portal.core.edu.au/core/media/conf_rank_report/higherrank1698_spc_report.txt

Graphs: http://portal.core.edu.au/core/media/conf_rank_graphs/higherrank1698_spc_graph.png

These graphs show numbers of people publishing in multiple years. Each column shows number of people in that many or more years. The number publishing in a specific number of years can be seen by the difference with respect to the previous column.



Reference item: \\ =====

REMARK:

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DBLP does not make a distinction between CADE and IJCAR:

The CADE website of DBLP lists also all IJCAR publications;

there is no separate IJCAR website.

Therefore, tools like <http://portal.core.edu.au/core-tools/wpp/> classify IJCAR publications as CADE publications.

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Ranking order is first by number of the above people publishing in the venue, then by number of their publications, then by number of years with at least one publication from these people.

1. Conference on Automated Deduction (CADE)

This conference was published at 56 times by 15 of 20 experts in the last 5 years.

The experts that publish at this conference are: Koen Claessen(2), Dale A. Miller(1), Lawrence C. Paulson(2), Pascal Fontaine(5), Renate A. Schmidt(2), Roberto Sebastiani(4), Cesare Tinelli(8), Silvio Ghilardi(3), Armin Biere(4), Deepak Kapur(3), Marijn Heule(7), Geoff Sutcliffe(6), Franz Baader(2), Josef Urban(9), Tobias Nipkow(2)

In 2015, there were 5 publications by 5 experts: Lawrence C. Paulson, Geoff Sutcliffe, Josef Urban, Marijn Heule, Pascal Fontaine

In 2016, there were 9 publications by 7 experts: Koen Claessen, Geoff Sutcliffe, Deepak Kapur, Roberto Sebastiani, Cesare Tinelli, Silvio Ghilardi, Armin Biere

In 2017, there were 13 publications by 8 experts: Dale A. Miller, Armin Biere, Pascal Fontaine, Marijn Heule, Roberto Sebastiani, Cesare Tinelli, Geoff Sutcliffe, Josef Urban

In 2018, there were 7 publications by 7 experts: Koen Claessen, Armin Biere, Marijn Heule, Renate A. Schmidt, Cesare Tinelli, Geoff Sutcliffe, Josef Urban

In 2019, there were 9 publications by 7 experts: Deepak Kapur, Silvio Ghilardi, Renate A. Schmidt, Roberto Sebastiani, Cesare Tinelli, Geoff Sutcliffe, Josef Urban

In 2020, there were 13 publications by 10 experts: Lawrence C. Paulson, Pascal Fontaine, Marijn Heule, Deepak Kapur, Cesare Tinelli, Silvio Ghilardi, Armin Biere, Franz Baader, Josef Urban, Tobias Nipkow

15 out of the 20 experts published at this conference in 1 or more years

12 out of the 20 experts published at this conference in 2 or more years

9 out of the 20 experts published at this conference in 3 or more years

5 out of the 20 experts published at this conference in 4 or more years

3 out of the 20 experts published at this conference in 5 or more years

Top People Report

Method of selection: We used the following method for collecting the list top 20 people:

- * search Google Scholar for people who list "automated reasoning", "automated deduction", "theorem proving", "automated theorem proving", "satisfiability", "SMT", "Satisfiability modulo theories" as their research interest.

- * restrict to those with h-index ≥ 45

- * discard the retired and deceased, as well as one name which was clearly incorrectly disambiguated.

- * remove duplicates — * add those AAI, EurAI and ACM Fellow that have Automated Reasoning as one of their research topics and have an h-index ≥ 45 .

	name	h-index	gscholar url
Keyword:	Holger Hoos	71	https://scholar.google.de/citations?hl=en&user=l6c85tMAAAAJ
	Uli Sattler	63	https://scholar.google.de/citations?hl=en&user=uMI-tgsAAAAJ
	Natarajan Shankar	53	https://scholar.google.de/citations?hl=en&user=qVzY4XYAAAAJ
	Joao Marques-Silva	53	https://scholar.google.de/citations?hl=en&user=1b9hppwAAAAJ
	Roberto Sebastiani	45	https://scholar.google.de/citations?hl=en&user=qmnmDYsAAAAJ
	Deepak Kapur	54	https://scholar.google.de/citations?hl=en&user=U6XKBVIAAAAAJ
	Franz Baader	62	https://scholar.google.de/citations?hl=en&user=dIVc_FYAAAAJ
	Frank Pfenning	64	https://scholar.google.de/citations?hl=en&user=ghWKWBAAAAJ
	Nikolaj Bjorner	47	https://scholar.google.de/citations?hl=en&user=kja6dIzH9GwJ
	J. Strother Moore	46	https://scholar.google.de/citations?hl=en&user=91fyr68AAAAJ
	Dale Miller	54	https://scholar.google.de/citations?hl=en&user=d9WopvMAAAAJ
	Alessandro Cimatti	61	https://scholar.google.de/citations?hl=en&user=lbZ6n5IAAAAAJ
	Armin Biere	55	https://scholar.google.de/citations?hl=en&user=V6ES1nIAAAAAJ
	Lawrence Paulson	53	https://scholar.google.de/citations?hl=en&user=Sv1hcjEAAAAJ
	Boris Motik	59	https://scholar.google.de/citations?hl=en&user=gKlqqSEAAAAJ
	Tobias Nipkow	51	https://scholar.google.de/citations?hl=en&user=lv19c_cAAAAJ
	Toby Walsh	71	https://scholar.google.com/citations?hl=en&user=o0Q6x0IAAAAAJ
	Thomas Eiter	71	https://scholar.google.com/citations?hl=en&user=X1L03cIAAAAAJ
	Diego Calvanese	72	https://scholar.google.com/citations?hl=en&user=WeOkRfEAAAAJ
	David Basin	58	https://scholar.google.com/citations?hl=en&user=-BA-kHYAAAAJ

Reference item: \ \ =====

REMARK:

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Therefore, tools like <http://portal.core.edu.au/core-tools/wpp/>
classify IJCAR publications as CADE publications.

=====

Ranking order is first by number of the above people publishing in the venue, then by number of their publications, then by number of years with at least one publication from these people.

1. Conference on Automated Deduction (CADE)

This conference was published at 24 times by 13 of 20 experts in the last 5 years.

The experts that publish at this conference are: Lawrence C. Paulson(2), Deepak Kapur(3), Roberto Sebastiani(4), Joo Marques-Silva 0001(1), Franz Baader(2), Armin Biere(4), Dale Miller 0001(1), Alessandro Cimatti(2), Natarajan Shankar(1), David A. Basin(1), Diego Calvanese(2), J. Strother Moore(1), Tobias Nipkow(2)

In 2015, there were 1 publications by 1 experts: Lawrence C. Paulson

In 2016, there were 4 publications by 3 experts: Roberto Sebastiani, Armin Biere, Deepak Kapur

In 2017, there were 6 publications by 6 experts: Dale Miller 0001, Alessandro Cimatti, Natarajan Shankar, Roberto Sebastiani, J. Strother Moore, Armin Biere

In 2018, there were 2 publications by 2 experts: Joo Marques-Silva 0001, Armin Biere

In 2019, there were 3 publications by 3 experts: Roberto Sebastiani, Diego Calvanese, Deepak Kapur

In 2020, there were 8 publications by 7 experts: Lawrence C. Paulson, David A. Basin, Deepak Kapur, Diego Calvanese, Franz Baader, Armin Biere, Tobias Nipkow

13 out of the 20 experts published at this conference in 1 or more years

5 out of the 20 experts published at this conference in 2 or more years

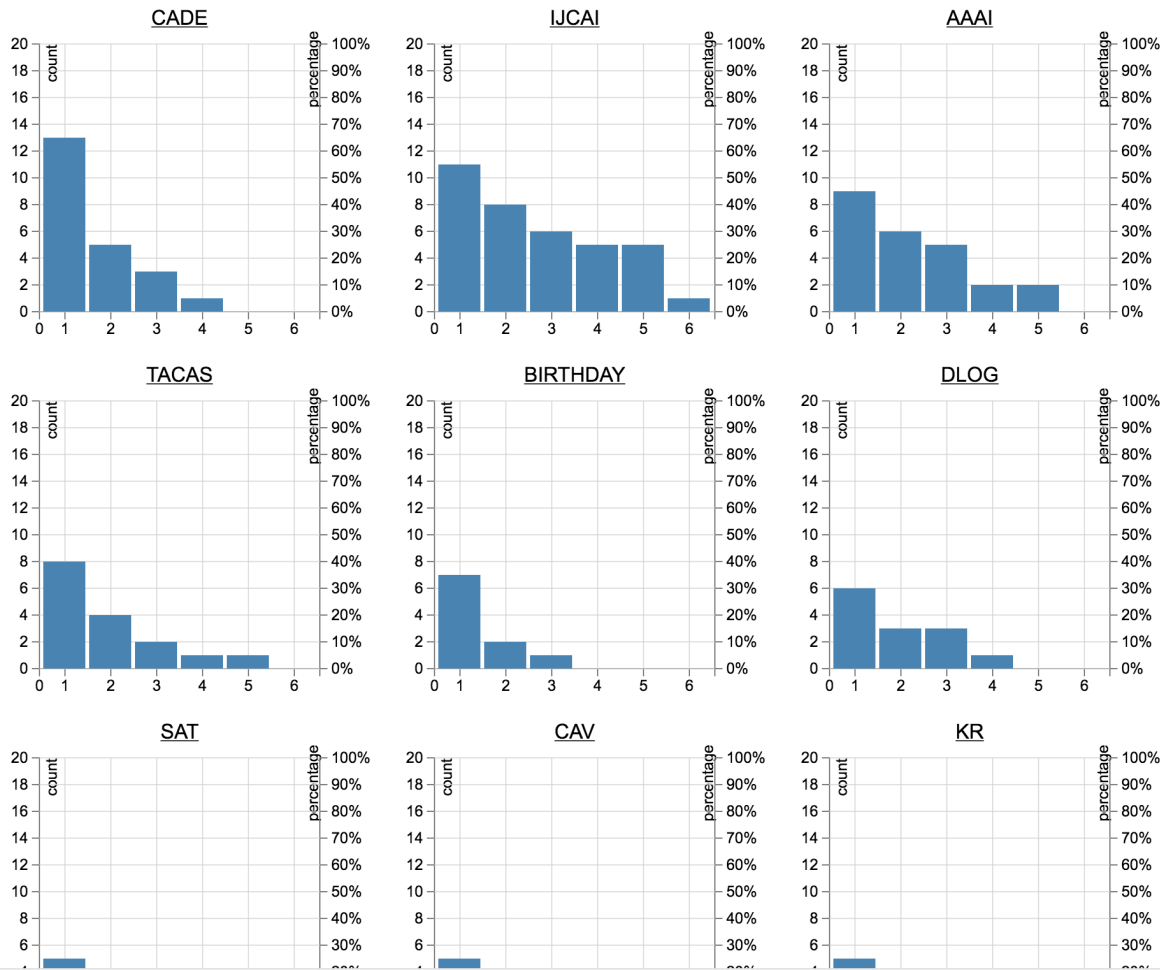
3 out of the 20 experts published at this conference in 3 or more years

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/higherrank1698_top_people_report.txt

Graphs: http://portal.core.edu.au/core/media/conf_rank_graphs/higherrank1698_top_people_graph.png

These graphs show numbers of people publishing in multiple years. Each column shows number of people in that many or more years. The number publishing in a specific number of years can be seen by the difference with respect to the previous column.



Other Information

Comparator Comparison

Comparator

International Symposium on Symbolic and Algebraic Computation

Explanation as to why conference is superior to comparator:

- ISSAC has a quite narrow scope - ISSAC does not release acceptance rate in the foreword to the proceedings - The PC and general chairs have in general relatively low h-index.

Link to comparator report:

http://portal.core.edu.au/core/media/conference_submission_2020/Data_Comparator_for_1698_1102.pdf

Comparator

International Conference on Functional Programming

Explanation as to why conference is superior to comparator:

- ICFP is an "Umbrella conference" - It has a relatively narrow field - The overall acceptance rate is unclear

Link to comparator report:

http://portal.core.edu.au/core/media/conference_submission_2020/Data_Comparator_for_1698_1103.pdf

Other Relevant Info

Other relevant information: The attached file contains the following information:

(1) Information about IJCAR (2) Fields of research of IJCAR in CORE (3) Clarification on IJCAR/CADE in DBLP (4) Comments on the Google Scholar statistics for IJCAR (5) Comments on the subgroup for Aminer Rank and some general comments

Attachments

http://portal.core.edu.au/core/media/request_attachment/Other_Relevant_Information_8B9R4qa.txt

Proposers

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