



**Submission Data for 2020-2021 CORE conference Ranking process  
Formal Methods in Computer-Aided Design**

Georg Weissenbacher

**Conference Details**

**Conference**

Title: Formal Methods in Computer-Aided Design  
Acronym : FMCAD  
Rank: Unranked

**Requested Rank**

Rank: A

**Recent Years**

**Proceedings Publishing Style**

Proceedings Publishing: self-contained  
Link to most recent proceedings: <https://www.tuwien.at/academicpress/en/produkt/proceedings-of-the-20th-conference-on-formal-methods-in-computer-aided-design-fmcad-2020-ebook/>  
Further details: 1.) Open Access Proceedings published by TU Wien Academic Press (DOI: 10.34727/2020/isbn.978-3-85448-042-6) and The University of Texas at Austin Library ( <https://repositories.lib.utexas.edu/handle/2152/83561>)  
2.) Proceedings are also published on IEEE Xplore Digital Library ( <https://ieeexplore.ieee.org/xpl/conhome/9283613/proceeding>)

**Most Recent Years**

**Most Recent Year**

Year: 2019  
URL: <https://doi.org/10.23919/FMCAD47411.2019>  
Location: San Jose, California  
Papers submitted: 61  
Papers published: 27  
Acceptance rate: 44  
Source for numbers: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8894260>

**General Chairs**

No General Chairs

**Program Chairs**

Name: Clark Barrett  
Affiliation: Stanford University  
Gender: M  
H Index: 41  
GScholar url: <https://scholar.google.com/citations?user=BtwnZfQAAAAJ>  
DBLP url: <https://dblp.uni-trier.de/pid/b/ClarkWBarrett.html>

Name: Jin Yang  
Affiliation: Intel  
Gender: M  
H Index: 15  
GScholar url: <https://scholar.google.com/citations?hl=en&user=1o3j7s2MD1AC>  
DBLP url:

## Second Most Recent Year

Year: 2018

URL: <https://ieeexplore.ieee.org/xpl/conhome/8891869/proceeding>

Location: Austin, Texas

Papers submitted: 73

Papers published: 26

Acceptance rate: 36

Source for numbers: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8603002>

### General Chairs

No General Chairs

### Program Chairs

Name: Arie Gurfinkel Affiliation: University of Waterloo Gender: M H Index: 32 G Scholar url: <a href="https://scholar.google.com/citations?user=WHTB3_MAAAAJ">https://scholar.google.com/citations?user=WHTB3_MAAAAJ</a> DBLP url: <a href="https://dblp.uni-trier.de/pid/44/3532.html">https://dblp.uni-trier.de/pid/44/3532.html</a>
Name: Nikolaj Bjorner Affiliation: Microsoft Research Gender: M H Index: 47 G Scholar url: <a href="https://scholar.google.com/citations?user=kja6dIzH9GwJ">https://scholar.google.com/citations?user=kja6dIzH9GwJ</a> DBLP url: <a href="https://dblp.uni-trier.de/pid/51/912.html">https://dblp.uni-trier.de/pid/51/912.html</a>

## Third Most Recent Year

Year: 2017

URL: <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=8093672>

Location: Vienna, Austria

Papers submitted: 67

Papers published: 29

Acceptance rate: 43

Source for numbers: <https://ieeexplore.ieee.org/document/8102225/>

### General Chairs

No General Chairs

### Program Chairs

Name: Georg Weissenbacher Affiliation: TU Wien Gender: M H Index: 18 G Scholar url: <a href="https://scholar.google.com/citations?user=1KfaH-QAAAAJ">https://scholar.google.com/citations?user=1KfaH-QAAAAJ</a> DBLP url: <a href="https://dblp.uni-trier.de/pid/15/3636.html">https://dblp.uni-trier.de/pid/15/3636.html</a>
Name: Daryl Stewart Affiliation: ARM Gender: M H Index: 2 G Scholar url: DBLP url: <a href="https://dblp.uni-trier.de/pid/127/2577.html">https://dblp.uni-trier.de/pid/127/2577.html</a>

## Policies

Chair Selection: (Co-)Chairs are selected by the Steering Committee. One co-chair is always from academia, the other one from industry.  
No Policies.

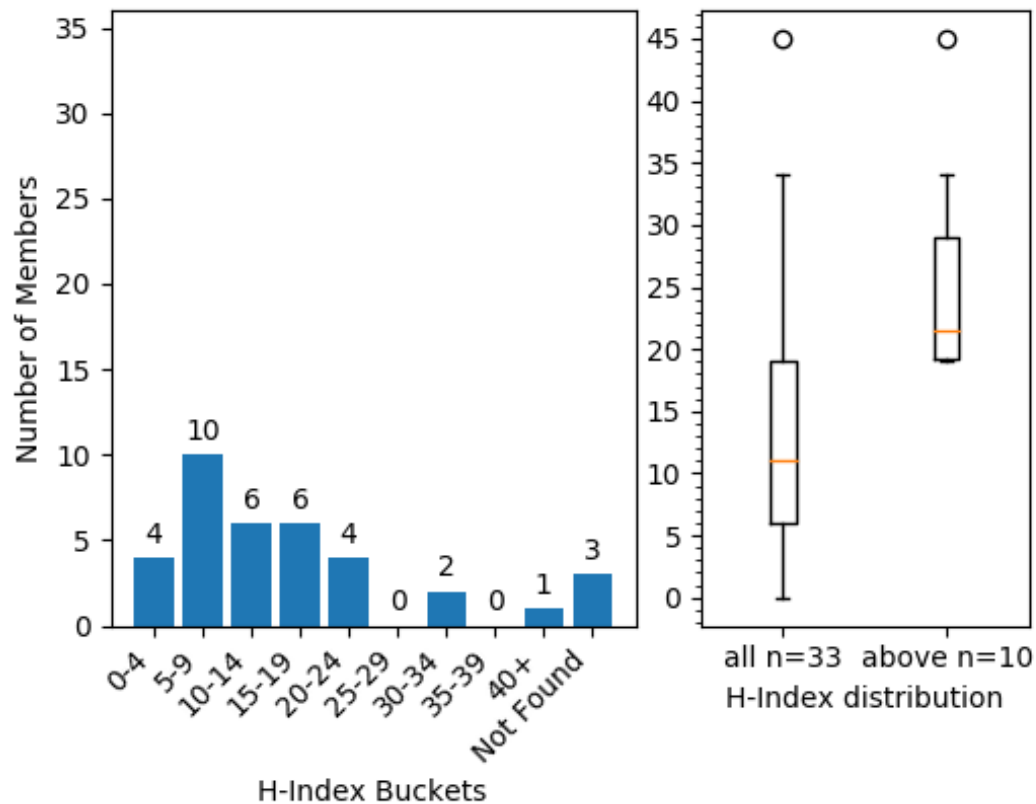
## (Senior) Program Committee

Link to (s)pc: <https://fmcad.forsyte.at/FMCAD19/cfp/>

File: [http://portal.core.edu.au/core/media/conf\\_submissions\\_spc\\_file/pc2019.txt](http://portal.core.edu.au/core/media/conf_submissions_spc_file/pc2019.txt)

H-index plot: [http://portal.core.edu.au/core/media/conf\\_submissions\\_hindex\\_plots/hindex\\_buckets\\_1618.png](http://portal.core.edu.au/core/media/conf_submissions_hindex_plots/hindex_buckets_1618.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.at/citations?view\\_op=top\\_venues&hl=en&vq=eng\\_computerhardwaredesign](https://scholar.google.at/citations?view_op=top_venues&hl=en&vq=eng_computerhardwaredesign)

Position in sub-category: 20+

Image of top 20: [http://portal.core.edu.au/core/media/changes\\_h5/higherrank1618\\_gscholar\\_minh5.png](http://portal.core.edu.au/core/media/changes_h5/higherrank1618_gscholar_minh5.png)

	Publication	<u>h5-index</u>	<u>h5-median</u>
1.	IEEE Transactions on Computers	<u>65</u>	97
2.	IEEE Journal of Solid-State Circuits	<u>65</u>	85
3.	IEEE International Solid-State Circuits Conference	<u>56</u>	74
4.	IEEE Transactions on Circuits and Systems I: Regular Papers	<u>55</u>	72
5.	Design Automation Conference (DAC)	<u>52</u>	75
6.	IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems	<u>47</u>	70
7.	Design, Automation and Test in Europe Conference and Exhibition (DATE)	<u>46</u>	60
8.	IEEE/ACM International Symposium on Microarchitecture	<u>45</u>	69
9.	IEEE Transactions on Very Large Scale Integration (VLSI) Systems	<u>45</u>	61
10.	IEEE Transactions on Circuits and Systems II: Express Briefs	<u>44</u>	60
11.	International Conference on Computer Aided Verification (CAV)	<u>38</u>	54
12.	IEEE Journal on Emerging and Selected Topics in Circuits and Systems	<u>36</u>	55
13.	IEEE/ACM International Conference on Computer-Aided Design (ICCAD)	<u>33</u>	39
14.	Symposium on Field Programmable Gate Arrays (FPGA)	<u>32</u>	51
15.	IEEE International Symposium on Circuits and Systems	<u>31</u>	39
16.	Asia and South Pacific Design Automation Conference (ASP-DAC)	<u>29</u>	40
17.	IEEE Symposium on VLSI Circuits (VLSIC)	<u>28</u>	38
18.	IEEE Symposium on Field-Programmable Custom Computing Machines	<u>27</u>	44
19.	Microprocessors and Microsystems	<u>27</u>	36
20.	Symposium on VLSI Circuits	<u>27</u>	34

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

h5-index for this conference: 17

### ACM Metrics

Not Sponsored by ACM

### Aminer Rank

Aminer rank: 220

Aminer name: Formal Methods in Computer-Aided Design






Acronym / shortname: FMCAD

h-5 index: 16

CCF level: C

THU level: B

Top Aminer Cites: [http://portal.core.edu.au/core/media/conf\\_submissions\\_citations/higherrank1618\\_aminer\\_top\\_cite.png](http://portal.core.edu.au/core/media/conf_submissions_citations/higherrank1618_aminer_top_cite.png)

1	CAQE: A Certifying QBF Solver Markus N. Rabe, Leander Tentrup (2015)	Cited by 81
2	Trustworthy specifications of ARM® v8-A and v8-M system level architecture Alastair Reid (2016)	Cited by 45
3	Column-wise verification of multipliers using computer algebra Daniela Ritirc  , Armin Biere, Manuel Kauers (2017)	Cited by 34
4	Property-directed k-induction Dejan Jovanovic, Bruno Dutertre (2016)	Cited by 32
5	Compositional Recurrence Analysis Azadeh Farzan  , Zachary Kincaid  (2015)	Cited by 31
6	Lazy sequentialization for TSO and PSO via shared memory abstractions Ermengildo Tomasco, Truc L. Nguyen, Omar Inverso, Bernd Fischer, Salvatore La Torre, Gennaro Parlato (2016)	Cited by 29
7	Learning Linear Temporal Properties Daniel Neider, Ivan Gawran  (2018)	Cited by 25
8	Hardware model checking competition 2017 Armin Biere, Tom van Dijk, Keijo Heljanko (2017)	Cited by 24
9	Template-based Synthesis of Instruction-Level Abstractions for SoC Verification Pramod Subramanyan, Yakir Vizel, Sayak Ray, Sharad Malik (2015)	Cited by 24
10	Equivalence checking using Gröbner bases Amr A. R. Sayed-Ahmed  , Daniel Große, Mathias Soeken, Rolf Drechsler (2016)	Cited by 23

## Other Rankings

Not aware of any other Rankings

Conferences in area:

## Top People Publishing Here

name: Kenneth McMillan

justification: h-index 58 ( <https://scholar.google.com/citations?user=pzFc-eEAAAAJ>)

ACM doctoral dissertation award, SRC technical excellence award, ACM Paris Kannelakis award, Alan Newell award from Carnegie Mellon, Computer-aided Verification Conference award ( <http://i-cav.org/cav-award/>)

Paper counts:

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

Attendance: SOMETIMES

name: Armin Biere

justification: h-index: 55 ( <https://scholar.google.com/citations?user=V6ES1nIAAAAJ>)

Computer-Aided Verification Conference Award ( <http://i-cav.org/cav-award/>)

Paper counts:

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

Attendance: ALWAYS

name: Alessandro Cimatti

justification: h-index: 61, more than 20k citations

Computer-Aided Verification Conference Award ( <http://i-cav.org/cav-award/>)

Paper counts:

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

Attendance: OFTEN

name: Sharad Malik

justification: h-index: 67, 27k citations ( <https://scholar.google.com/citations?user=MV8KGT0AAAAJ&hl=en&oi=ao>)

Computer-Aided Verification Conference Award ( <http://i-cav.org/cav-award/>)

Paper counts:

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

Attendance: OCCASIONALLY

name: Daniel Kroening

justification: h-index: 55 ( <https://scholar.google.com/citations?user=DHddutUAAAAJ&hl=en&oi=ao>)

Computer-Aided Verification Conference Award ( <http://i-cav.org/cav-award/>)

Paper counts:

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

Attendance: OCCASIONALLY

name: Arie Gurfinkel

justification: h-index: 32 ( [https://scholar.google.com/citations?user=WHTB3\\_MAAAAJ&hl=en&oi=ao](https://scholar.google.com/citations?user=WHTB3_MAAAAJ&hl=en&oi=ao))

Paper counts:

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

Attendance: ALWAYS

name: Cesare Tinelli

justification: h-index: 42 ( <https://scholar.google.com/citations?user=wbZc9nUAAAAJ&hl=en&oi=ao>)

Paper counts:

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

Attendance: SOMETIMES

name: Moshe Vardi

justification: h-index: 110 ( <https://dblp.uni-trier.de/pid/v/MosheYVardi.html>)

Highly cited researcher

Guggenheim Fellow, Fellow of the Association for Computing Machinery, Fellow of American Association for the Advancement of Science, and Fellow of the American Association for Artificial Intelligence.

Paper counts:

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

Attendance: OCCASIONALLY

name: Aarti Gupta

justification: h-index: 46 ( [https://scholar.google.com/citations?user=S\\_jYB2sAAAAJ&hl=en&oi=ao](https://scholar.google.com/citations?user=S_jYB2sAAAAJ&hl=en&oi=ao))

Paper counts:

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

Attendance: OCCASIONALLY

name: Roderick Bloem

justification: h-index: 37 ( <https://scholar.google.com/citations?user=Sv1AfEYAAAAJ&hl=en&oi=ao>)

Paper counts:

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

Attendance: OFTEN

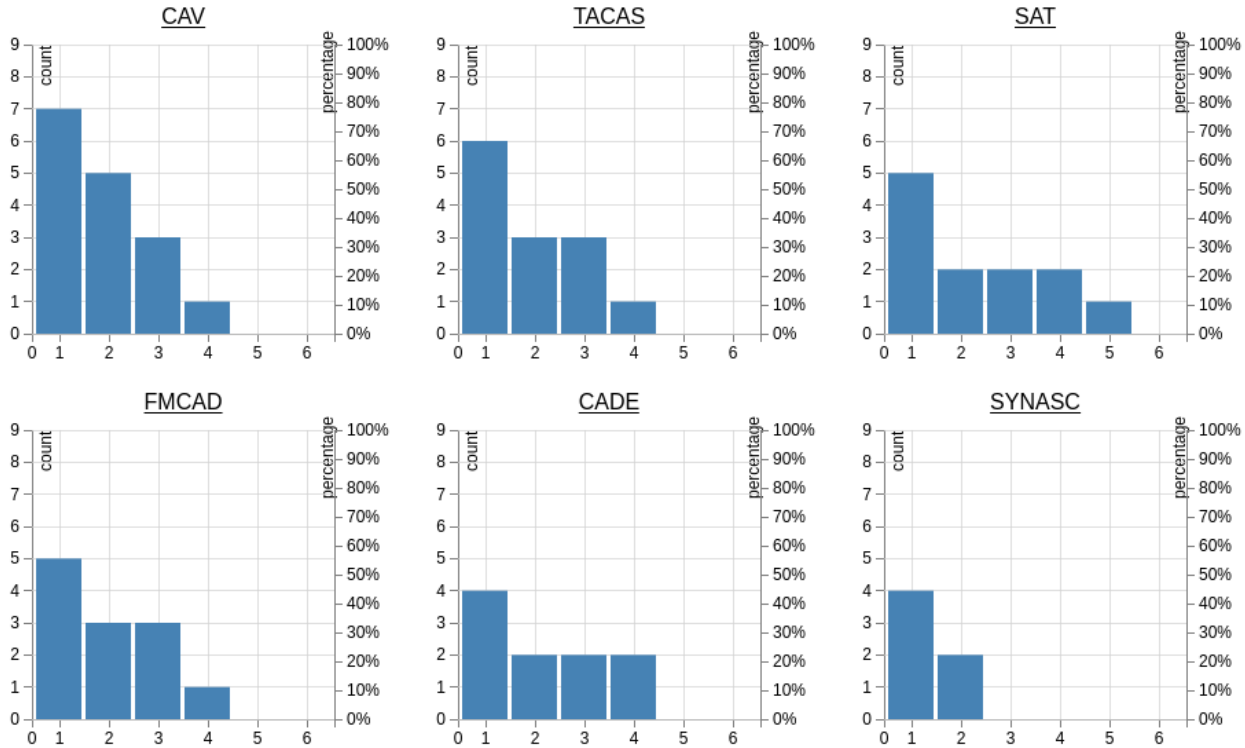
## Where People Publish

### Top (Senior) Program Committee Members

Generated Report Name: conf\_submissions\_top\_spc/higherrank1618\_top\_spc.csv

WPP Report: [http://portal.core.edu.au/core/media/conf\\_rank\\_report/higherrank1618\\_spc\\_report.txt](http://portal.core.edu.au/core/media/conf_rank_report/higherrank1618_spc_report.txt)

Graphs: [http://portal.core.edu.au/core/media/conf\\_rank\\_graphs/higherrank1618\\_spc\\_graph.png](http://portal.core.edu.au/core/media/conf_rank_graphs/higherrank1618_spc_graph.png)



Reference item: \\ 4. Formal Methods in Computer-Aided Design (FMCAD)

-----  
This conference was published at 14 times by 5 of 9 experts in the last 5 years.

The experts that publish at this conference are: Alberto Griggio(1), Roderick Bloem(5), Armin Biere(4), Kenneth L. McMillan(3), Armando Solar-Lezama(1)

In 2015, there were 3 publications by 3 experts: Armin Biere, Kenneth L. McMillan, Roderick Bloem  
 In 2016, there were 3 publications by 3 experts: Roderick Bloem, Kenneth L. McMillan, Armando Solar-Lezama  
 In 2017, there were 2 publications by 1 experts: Armin Biere  
 In 2018, there were 4 publications by 3 experts: Alberto Griggio, Kenneth L. McMillan, Roderick Bloem  
 In 2019, there were 2 publications by 2 experts: Armin Biere, Roderick Bloem

5 out of the 9 experts published at this conference in 1 or more years  
 3 out of the 9 experts published at this conference in 3 or more years  
 1 out of the 9 experts published at this conference in 4 or more years

## Top People Report

Method of selection: Top researchers in the field of formal verification (first 10) and formal methods (second 10) according to Google Scholar  
 Keyword: formal verification

name	h-index	gscholar url
David Dill	78	<a href="https://scholar.google.at/citations?hl=en&amp;user=uy8T6BYAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=uy8T6BYAAAAJ</a>
Randal Bryant	58	<a href="https://scholar.google.at/citations?hl=en&amp;user=AFgYa68AAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=AFgYa68AAAAAJ</a>
Orna Grumberg	52	<a href="https://scholar.google.at/citations?hl=en&amp;user=ZPed8YYAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=ZPed8YYAAAAAJ</a>
Sharad Malik	67	<a href="https://scholar.google.at/citations?hl=en&amp;user=MV8KGT0AAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=MV8KGT0AAAAAJ</a>
Kenneth McMillan	58	<a href="https://scholar.google.at/citations?hl=en&amp;user=pzFc-eEAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=pzFc-eEAAAAAJ</a>
Virendra Singh	61	<a href="https://scholar.google.at/citations?hl=en&amp;user=cmRwYjAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=cmRwYjAAAAAJ</a>
Alessandro Cimatti	61	<a href="https://scholar.google.at/citations?hl=en&amp;user=lbZ6n5IAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=lbZ6n5IAAAAAJ</a>
Armin Biere	55	<a href="https://scholar.google.at/citations?hl=en&amp;user=V6ES1nIAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=V6ES1nIAAAAAJ</a>
Jacob Abraham	61	<a href="https://scholar.google.at/citations?hl=en&amp;user=rmkFbFsAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=rmkFbFsAAAAAJ</a>
John Rushby	57	<a href="https://scholar.google.at/citations?hl=en&amp;user=6McSapAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=6McSapAAAAAJ</a>
Edmund Clarke	101	<a href="https://scholar.google.at/citations?hl=en&amp;user=_adL2C8AAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=_adL2C8AAAAAJ</a>
Tony Hoare	71	<a href="https://scholar.google.at/citations?hl=en&amp;user=v-Yd0ywAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=v-Yd0ywAAAAAJ</a>
Rajeev Alur	90	<a href="https://scholar.google.at/citations?hl=en&amp;user=kWnv_YkAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=kWnv_YkAAAAAJ</a>
Somesh Jha	84	<a href="https://scholar.google.at/citations?hl=en&amp;user=BaI7l8QAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=BaI7l8QAAAAAJ</a>
George J. Pappas	91	<a href="https://scholar.google.at/citations?hl=en&amp;user=Kia-4B0AAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=Kia-4B0AAAAAJ</a>
David McAllester	64	<a href="https://scholar.google.at/citations?hl=en&amp;user=nbpafUkAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=nbpafUkAAAAAJ</a>
Jeannette M Wing	55	<a href="https://scholar.google.at/citations?hl=en&amp;user=2NjS1dUAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=2NjS1dUAAAAAJ</a>
Patrick Cousot	55	<a href="https://scholar.google.at/citations?hl=en&amp;user=mhlvI8wAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=mhlvI8wAAAAAJ</a>
Helmut Veith	41	<a href="https://scholar.google.at/citations?hl=en&amp;user=mhlvI8wAAAAAJ">https://scholar.google.at/citations?hl=en&amp;user=mhlvI8wAAAAAJ</a>
Aarti Gupta	46	<a href="https://scholar.google.com/citations?user=S_jYB2sAAAAAJ&amp;hl=en&amp;oi=ao">https://scholar.google.com/citations?user=S_jYB2sAAAAAJ&amp;hl=en&amp;oi=ao</a>

Reference item: \ . Formal Methods in Computer-Aided Design (FMCAD)

-----

This conference was published at 16 times by 6 of 19 experts in the last 5 years.

The experts that publish at this conference are: Aarti Gupta(2), Helmut Veith(1), Armin Biere(4), Alessandro Cimatti(3), Kenneth L. McMillan(3), Sharad Malik(4)

In 2015, there were 6 publications by 5 experts: Alessandro Cimatti, Kenneth L. McMillan, Armin Biere, Sharad Malik, Helmut Veith

In 2016, there were 1 publications by 1 experts: Kenneth L. McMillan

In 2017, there were 4 publications by 3 experts: Alessandro Cimatti, Armin Biere, Sharad Malik

In 2018, there were 4 publications by 4 experts: Alessandro Cimatti, Kenneth L. McMillan, Aarti Gupta, Sharad Malik

In 2019, there were 1 publications by 1 experts: Armin Biere

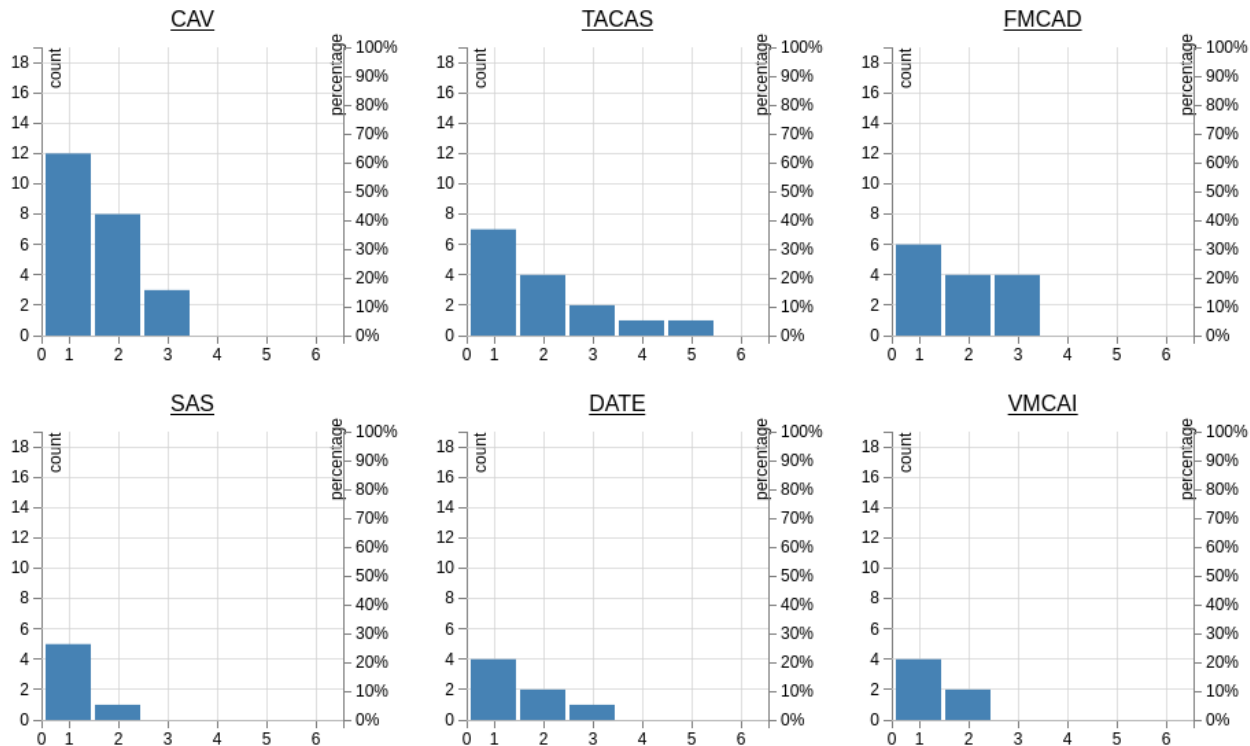
6 out of the 19 experts published at this conference in 1 or more years

4 out of the 19 experts published at this conference in 3 or more years WPP Report:

[http://portal.core.edu.au/core/media/conf\\_rank\\_report/higherrank1618\\_top\\_people\\_report.txt](http://portal.core.edu.au/core/media/conf_rank_report/higherrank1618_top_people_report.txt)

Graphs: [http://portal.core.edu.au/core/media/conf\\_rank\\_graphs/higherrank1618\\_top\\_people\\_graph.png](http://portal.core.edu.au/core/media/conf_rank_graphs/higherrank1618_top_people_graph.png)





## Other Information

### Comparator Comparison

#### Comparator

International Symposium on Formal Methods (was Formal Methods Europe FME)

Explanation as to why conference is superior to comparator:

Equally good/comparable based on h5 and h-numbers of co-chairs

Link to comparator report:

[http://portal.core.edu.au/core/media/conference\\_submission\\_2020/Data\\_Comparator\\_for\\_1618\\_851.pdf](http://portal.core.edu.au/core/media/conference_submission_2020/Data_Comparator_for_1618_851.pdf)

#### Comparator

International Symposium on Automated Technology for Verification and Analysis

Explanation as to why conference is superior to comparator:

Equally good/comparable based on h5 and h-numbers of co-chairs

Link to comparator report:

[http://portal.core.edu.au/core/media/conference\\_submission\\_2020/Data\\_Comparator\\_for\\_1618\\_951.pdf](http://portal.core.edu.au/core/media/conference_submission_2020/Data_Comparator_for_1618_951.pdf)

## Other Relevant Info

Other relevant information: FMCAD has a strict policy of picking one chair from EDA industry, which in some cases results in lower h-indices.

## Attachments

N/A

## Proposers

First name: Georg

Last name: Weissenbacher

Affiliation: TU Wien

Email: [georg.weissenbacher@tuwien.ac.at](mailto:georg.weissenbacher@tuwien.ac.at)

## Submitted By

Name: Weissenbacher Georg

Email: [georg.weissenbacher@gmx.at](mailto:georg.weissenbacher@gmx.at)