

# Submission Data for 2020-2021 CORE conference Ranking process ACM-SIGACT Symposium on Principles of Programming Languages

Derek Dreyer

### **Conference Details**

#### Conference

Title: ACM-SIGACT Symposium on Principles of Programming Languages

Acronym: POPL

Rank: A\*

### **Requested Rank**

Rank: A\*

#### **Recent Years**

### **Proceedings Publishing Style**

Proceedings Publishing: journal

Link to most recent proceedings: https://dl.acm.org/toc/pacmpl/2020/4/POPL

Further details: Since 2018, the proceedings of POPL have been published as an issue of the journal PACMPL (Proceedings of the ACM on Programming Languages). The OOPSLA and ICFP conference proceedings are also now published as (separate) issues of PACMPL. As part of the transition to PACMPL, POPL now employs a two-phase review process to ensure that reviewer comments are addressed in the final versions of papers.

### **Most Recent Years**

### **Most Recent Year**

Year: 2019

URL: https://popl19.sigplan.org/

Location: Cascais, Portugal Papers submitted: 267 Papers published: 77 Acceptance rate: 29

Source for numbers: https://popl19.sigplan.org/details/POPL-2019-Research-Papers/14/PC-Chair-Report

# **General Chairs**

Name: Fritz Henglein

Affiliation: University of Copenhagen

Gender: M H Index: 25

GScholar url: https://scholar.google.dk/citations?user=FOM81UEAAAAJ&hl=en

DBLP url: https://dblp.org/pid/h/FritzHenglein.html

### **Program Chairs**

Name: Stephanie Weirich

Affiliation: University of Pennsylvania

Gender: F H Index: 34

GScholar url: https://scholar.google.com/citations?user=-vC\_12kAAAAJ&hl=en

DBLP url: https://dblp.org/pid/w/StephanieWeirich.html

#### Second Most Recent Year

Year: 2018

URL: https://popl18.sigplan.org/

Location: Los Angeles, USA Papers submitted: 271 Papers published: 66 Acceptance rate: 24

Source for numbers: https://www.cs.cornell.edu/andru/popl18/#/

#### **General Chairs**

Name: Ranjit Jhala

Affiliation: University of California, San Diego

Gender: M H Index: 45

GScholar url: https://scholar.google.com/citations?user=H3wb878AAAAJ&hl=en

DBLP url: https://dblp.org/pid/47/4244.html

### **Program Chairs**

Name: Andrew C. Myers Affiliation: Cornell University

Gender: M H Index: 52

GScholar url: https://scholar.google.com/citations?user=ovlpa\_IAAAAJ&hl=en

DBLP url: https://dblp.org/pid/m/AndrewCMyers.html

### **Third Most Recent Year**

Year: 2017

URL: https://popl17.sigplan.org/

Location: Paris, France Papers submitted: 282 Papers published: 64 Acceptance rate: 23

Source for numbers: https://dl.acm.org/action/showFmPdf?doi=10.1145%2F3009837

### **General Chairs**

Name: Giuseppe Castagna

Affiliation: CNRS, UniversitÃl' de Paris

Gender: M H Index: 37

 $GScholar\ url:\ https://scholar.google.com/citations?user=pBOv874AAAAJ\&hl=en$ 

DBLP url: https://dblp.org/pid/c/GiuseppeCastagna.html

### **Program Chairs**

Name: Andrew D. Gordon

Affiliation: Microsoft Research and University of Edinburgh

Gender: M H Index: 60

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

DBLP url: https://dblp.org/pid/g/AndrewDGordon.html

### **Policies**

Chair Selection: According to the "Principles of POPL" document (https://www.sigplan.org/Conferences/POPL/Principles/), the POPL General Chair for year X+2 is selected by the POPL Steering Committee for year X, subject to the approval of the SIGPLAN Executive Committee. The General Chair selects the Program Chair. The General and Program Chairs select other members of the Organizing Committee.

General Chairs are typically selected based on a combination of their prominence within the PL community and their suitability for doubling as a "local arrangements chair" (POPL typically does not have a separate local arrangements chair).

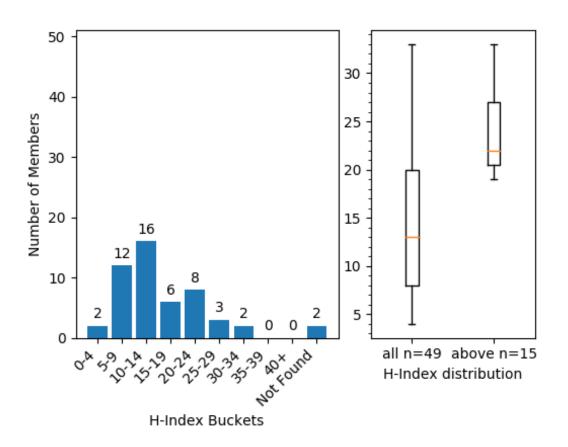
Program Chairs are selected based on their distinguished research record and visibility within the PL community. For example, Andrew Gordon (POPL'17 PC chair) is indisputably a world leader in PL, with h-index 60. Andrew Myers (POPL'18 PC chair) is editor-in-chief of TOPLAS. Stephanie Weirich (POPL'19 PC chair) is recipient of the 2016 ACM SIGPLAN Robin Milner Young Researcher Award.

Policy name: Principles of POPL

Policy url: https://www.sigplan.org/Conferences/POPL/Principles/

# (Senior) Program Committee

Link to (s)pc: https://popl19.sigplan.org/committee/popl-2019-research-papers-program-committee
File: http://portal.core.edu.au/core/media/conf\_submissions\_spc\_file/POPL\_fuAAvcO.txt
H-index plot: http://portal.core.edu.au/core/media/conf\_submissions\_hindex\_plots/hindex\_buckets\_1436.png
Information Contained within this graph is derived using the Elsevier Scopus Database 2021.



# **Data and Metrics**

# **Google Scholar Metrics**

Sub-category url:  $https://scholar.google.de/citations?view_op=top_venues&hl=en&vq=eng_softwaresystems$  Position in sub-category: 7

lmage of top 20: http://portal.core.edu.au/core/media/changes\_h5/higherrank1436\_gscholar\_minh5.png

	Publication	<u>h5-index</u>	h5-median
1.	ACM/IEEE International Conference on Software Engineering	<u>74</u>	111
2.	Journal of Systems and Software	<u>61</u>	90
3.	Information and Software Technology	<u>59</u>	90
4.	ACM SIGSOFT International Symposium on Foundations of Software Engineering	<u>53</u>	78
5.	Empirical Software Engineering	<u>53</u>	75
6.	IEEE Transactions on Software Engineering	<u>52</u>	77
7.	ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL)	<u>48</u>	76
8.	ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI)	<u>46</u>	78
9.	IEEE/ACM International Conference on Automated Software Engineering (ASE)	<u>45</u>	75
10.	IEEE Software	<u>44</u>	90
11.	Symposium on Operating Systems Principles	<u>42</u>	77
12.	Software & Systems Modeling	<u>41</u>	55
13.	Mining Software Repositories	<u>40</u>	52
14.	International Conference on Software Analysis, Evolution, and Reengineering (SANER)	<u>40</u>	48
15.	International Symposium on Software Testing and Analysis	<u>36</u>	61
16.	International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS)	<u>33</u>	54
17.	IEEE International Conference on Software Maintenance and Evolution	<u>33</u>	46
18.	Proceedings of the ACM on Programming Languages	<u>31</u>	46
19.	Software: Practice and Experience	<u>30</u>	36
20.	ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)	<u>29</u>	44

h5-index for this conference: 48

# **ACM Metrics**

Is an ACM sponsored conference: True

Providing ACM Stats: True

### **ACM Statistics**

Downloads in last 12 months: 98445 Average citations per article: 45 Average downloads per article: 454

Reason for not providing ACM people: We are not including the ACM data about most-frequently-publishing POPL authors (URL: https://dl.acm.org/conference/popl/authors?AfterYear=1973&BeforeYear=2020&startPage=&Ppub=%5B20151228%20T0%2020201228%5D) because it is bogus: it doesn't count papers it should and it does count papers it shouldn't. Specifically:

- 1. The ACM data only includes counts of POPL papers from 2016 and 2017, and fails to count POPL papers from 2018-2020 because those were published as issues of the PACMPL journal.
- 2. The ACM data for POPL counts also appears to include papers from the CPP conference, presumably because it is co-located with POPL (we are not sure).

To give a few examples of how wrong the ACM data is:

- The page lists Yannick Forster as the most-frequently-publishing POPL author in the past 5 years, with (supposedly) 6 papers. But in fact, he only has 2 POPL papers, both in 2020, which are not contributing to the count. The count of 6 arises from Forster's 6 \*CPP\* papers.
- The page lists Krishnendu Chatterjee, one of the most prolific POPL authors of recent years, as having only 3 POPL papers in the past 5 years because that is the number of POPL papers he has in 2016-2017, but in fact he has 8 POPL papers in 2016-2020 and 10 in the period 2015-2020.

Thus, we believe the ACM data is too unreliable to be worth reporting. Instead, we report below the \*actual\* most-frequently-publishing POPL authors in the period 2015-2020 according to DBLP (data compiled via CSrankings).

Please refer to our supporting material in the "Other Information" section for a spreadsheet with the complete and correct list of authors publishing in POPL, PLDI, ICFP, and OOPSLA in 2015-2020, derived from DBLP and CSrankings.

### **Aminer Rank**

Aminer rank: 3

Aminer name: ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages

Acronym / shortname: POPL

h-5 index: 46 CCF level: A THU level: A

Multiparty Asynchronous Session Types	Cited by 774
Kohei Honda, Nobuko Yoshida, Marco Carbone	
(2016)	
)	
Automatic patch generation by learning correct code	Cited by 355
Fan Long, Martin Rinard (2016)	
Predicting Program Properties from \"Big Code\"	Cited by 258
/eselin Raychev, Martin T. Vechev, Andreas Krause (2015)	
Dependent types and multi-monadic effects in F	Cited by <b>206</b>
vikhil Swamy, Catalin Hritcu, Chantal Keller 🔍 , Aseem Rastogi, Antoine Delignat-Lavaud, Simon Forest 🔍 , Karthikeyan Bhargavan, Cédric Fournet, Pierre-Y Jean Karim Zinzindohoue 🔾 , Santiago Zanella Béguelin	
(2016)	
Cause I'm Strong Enough: Reasoning about Consistency Choices in Distributed Systems	Cited by 148
Alexey Gotsman, Hongseok Yang, Carla Ferreira, Mahsa Najafzadeh, Marc Shapiro (2016)	,
)	
Deep Specifications and Certified Abstraction Layers	Cited by 13
Ronghui Gu, Jérémie Koenig, Tahina Ramananandro, Zhong Shao, Xiongnan (Newman) Wu, Shu-Chun Weng, Haozhong Zhang, Yu Guo (2015)	
A Formally-Verified C Static Analyzer	Cited by 134
acques-Henri Jourdan, Vincent Laporte, Sandrine Blazy, Xavier Leroy, David Pichardie (2015)	
)	
K-Java: A Complete Semantics of Java	Cited by 12
Denis Bogdanas, Grigore Rosu (2015)	
earning Invariants using Decision Trees and Implication Counterexamples	
Pranav Garg 0001, Daniel Neider, P. Madhusudan, Dan Roth	Cited by 11
(2015)	
From Communicating Machines to Graphical Choreographies	Cited by 11
lulien Lange, Emilio Tuosto, Nobuko Yoshida	

# **Other Rankings**

URL: http://csrankings.org/#/index?plan&world

Description: CSrankings ranks institutions based on counting publications in top venues across Computer Science. In the area of Programming Languages, CSrankings counts POPL and PLDI papers by default, and includes checkbox options for also counting ICFP and/or OOPSLA papers.

Rank: Top venue in PL

Conferences in area: ACM SIGPLAN considers POPL, PLDI, ICFP, and OOPSLA to be the 4 flagship conferences in Programming Languages. Of course, there are a number of other conferences that are top venues in closely related topics, such as (but not limited to) program verification (CAV) and computational logic (LICS).

We prefer not to order these conferences: Programming Languages is a diverse community, and different members of the community prioritize different venues, depending on their particular research topic.

However, we believe it is safe to say that POPL, being the oldest conference in the field, and maintaining the highest h5-index of any of the aforementioned conferences, is viewed widely as an indisputably top conference in Programming Languages.

### **Top People Publishing Here**

name: Thomas W. Reps

justification: H-index: 79. ACM Fellow (2005). Recipient of the 2017 ACM SIGPLAN Programming Languages Achievement Award.

POPL 2000 Program Chair.

Paper counts:

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

Attendance: OFTEN name: Martin C. Rinard

justification: H-index: 71. ACM Fellow (2009).

Paper counts:

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

Attendance: OFTEN name: Benjamin C. Pierce

justification: H-index: 65. ACM Fellow (2012). Author of two of the most widely used textbooks in programming languages: Types and Programming Languages, and Software Foundations. Recipient of the inaugural 2020 ACM SIGPLAN Distinguished Educator Award. SIGPLAN Vice Chair (2018-2020). POPL 2009 Program Chair.

Paper counts:

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

Attendance: ALWAYS name: Shmuel Sagiv

justification: H-index: 61. ACM Fellow (2015). POPL 2011 Program Chair.

Paper counts:

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

Attendance: ALWAYS name: Robert Harper

justification: H-index: 54. ACM Fellow (2005). Author of the widely-used programming languages textbook Practical Foundations for Programming Languages. Co-developer of the Standard ML programming language. Recipient of the 2006 ACM SIGPLAN Most Influential PLDI Paper Award for his 1996 paper, "TIL: A Type-Directed Optimizing Compiler for ML".

Paper counts:

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

Attendance: OFTEN name: Nobuko Yoshida

justification: H-index: 53. Recipient of the 2018 ACM SIGPLAN Most Influential POPL Paper Award for her 2008 paper, "Multiparty Asynchronous Session Types".

Paper counts:

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

Attendance: OFTEN name: David Walker

justification: H-index: 53. Recipient of the 2015 ACM SIGPLAN Robin Milner Young Researcher Award. Recipient of the 2008 ACM SIGPLAN Most Influential POPL Paper Award for his 1998 paper, "From System F to Typed Assembly Language". POPL 2015 Program Chair.

Paper counts:

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

Attendance: ALWAYS

name: Krishnendu Chatterjee

justification: H-index: 52. Recipient of both ERC Starting and Consolidator grants (it is rare to receive both). Extremely prolific (18 LICS papers, 20 CAV papers, etc.) with 10 POPL papers in the past 6 years, and only received PhD in 2007.

Paper counts:

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

Attendance: OFTEN name: Lars Birkedal

justification: H-index: 45. ACM Fellow (2017). Recipient of the 2013 ACM SIGPLAN Robin Milner Young Researcher Award. POPL 2020

Program Chair. Paper counts:

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

Attendance: ALWAYS name: Martin Vechev

justification: H-index: 41. Recipient of the 2019 ACM SIGPLAN Robin Milner Young Researcher Award. PLDI 2017 Program Chair.

Paper counts:

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

Attendance: ALWAYS

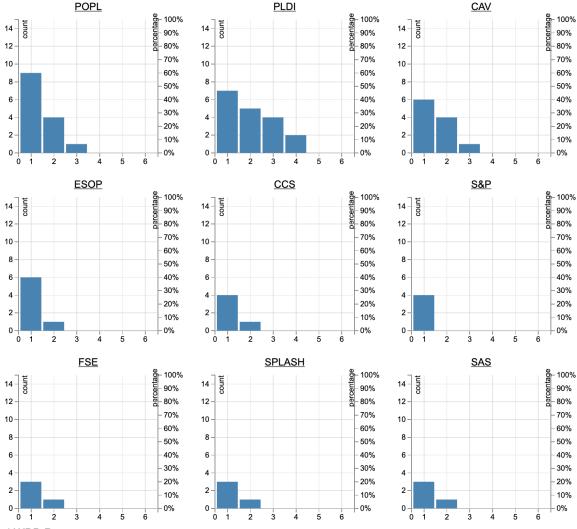
### Where People Publish

### **Top (Senior) Program Committee Members**

Generated Report Name: conf\_submissions\_top\_spc/higherrank1436\_top\_spc.csv

WPP Report: http://portal.core.edu.au/core/media/conf\_rank\_report/higherrank1436\_spc\_report.txt

Graphs: http://portal.core.edu.au/core/media/conf\_rank\_graphs/higherrank1436\_spc\_graph.png



Journal WPP Report: http://portal.core.edu.au/core/media/conf\_rank\_journal\_report/higherrank1436\_spc\_jnl\_report.txt

Reference item: \\ 1. ACM-SIGACT Symposium on Principles of Programming Languages (POPL)

\_\_\_\_\_

This conference was published at 16 times by 9 of 15 experts in the last 5 years.

The experts that publish at this conference are: Gavin M. Bierman(1), Nikhil Swamy(3), Andreas Podelski(2), Mayur Naik(1), Nate Foster(3), Martin Erwig(1), Parthasarathy Madhusudan(1), Stephanie Weirich(4), David A. Naumann(1)

In 2015, there were 7 publications by 5 experts: Nate Foster, Gavin M. Bierman, Nikhil Swamy, Stephanie Weirich, Andreas Podelski

In 2016, there were 4 publications by 4 experts: Nikhil Swamy, Martin Erwig, Parthasarathy Madhusudan, Mayur Naik

In 2017, there were 5 publications by 5 experts: Nate Foster, Nikhil Swamy, Stephanie Weirich, Andreas Podelski, David A. Naumann

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9 out of the 15 experts published at this conference in 1 or more years 4 out of the 15 experts published at this conference in 2 or more years 1 out of the 15 experts published at this conference in 3 or more years
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#### **Top People Report**

Method of selection: Picking the top 20 people (ranked by total # of citations) whom Google Scholar lists as having first interest "Programming Languages" or "Programming Languages and Software Engineering" or "Functional Programming", omitting the retired and deceased, and sorting by h-index.

Keyword: Programming languages, Programming languages and software engineering, Functional programming

	Reyword. Frogramming ia		rogramming languages and software engineering, runctional programming
	name	h-index	gscholar url
ĺ	Simon L. Peyton Jones	87	https://scholar.google.co.uk/citations?hl=en&user=QsX7G-cAAAAJ
	Thomas W. Reps	79	https://scholar.google.com/citations?user=pwhyTqOAAAAJ
	Alexander Aiken	75	https://scholar.google.com/citations?user=3vKjkoQAAAAJ
	Philip Wadler	73	https://scholar.google.com/citations?user=Iz-3VFQAAAAJ
	James R. Larus	69	https://scholar.google.com/citations?user=xWZTGPUAAAAJ&hl=en
	Benjamin C. Pierce	65	https://scholar.google.com/citations?user=2kkddh0AAAAJ
	Frank Pfenning	64	https://scholar.google.com/citations?user=ghWKWBUAAAAJ&hl=en
	Matthias Felleisen	62	https://scholar.google.com/citations?user=KP-Vo44AAAAJ
	Gul Agha	62	https://scholar.google.com/citations?user=orHlhhQAAAAJ&hl=en
	Shmuel Sagiv	61	https://scholar.google.com/citations?user=j4UuW8OAAAAJ
	Andrew D. Gordon	60	https://scholar.google.com/citations?user=mfBjUiIAAAAJ&hl=en
	Keshav Pingali	59	https://scholar.google.com/citations?user=02UU6wgAAAAJ&hl=en
	Martin Odersky	59	https://scholar.google.com/citations?user=LbRD9tEAAAAJ&hl=en
	Sriram Rajamani	55	https://scholar.google.com/citations?user=o-EdErcAAAAJ&hl=en
	Robert Harper	54	https://scholar.google.com/citations?user=hbpHGtQAAAAJ
	David Walker	53	https://scholar.google.com/citations?user=UEI2g60AAAAJ
	Cristina Lopes	53	https://scholar.google.com/citations?user=FaY_RgsAAAAJ&hl=en
	Andrew C. Myers	52	https://scholar.google.com/citations?user=ovlpa_IAAAAJ&hl=en
	J. Eliot B. Moss	52	https://scholar.google.com/citations?user=yYtaDFUAAAAJ&hl=en
	Xavier Leroy	52	https://scholar.google.com/citations?user=K5yXAeAAAAAJ&hl=en

Reference item: \\ 2. ACM-SIGACT Symposium on Principles of Programming Languages (POPL)

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This conference was published at 15 times by 10 of 20 experts in the last 5 years.

The experts that publish at this conference are: Benjamin C. Pierce(1), Alex Aiken(1), Frank Pfenning(2), Matthias Felleisen(1), Robert Harper 0001(2), Thomas W. Reps(2), Shmuel Sagiv(2), Xavier Leroy(1), David Walker(2), Andrew D. Gordon(1)

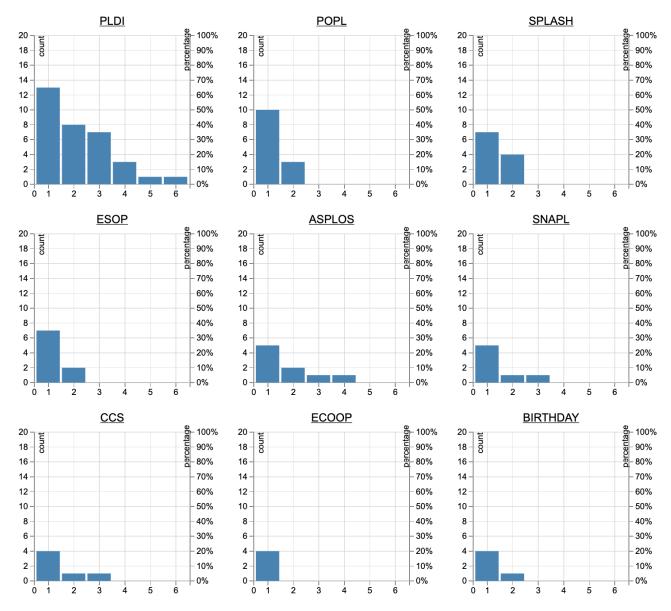
In 2015, there were 4 publications by 4 experts: Shmuel Sagiv, Frank Pfenning, Xavier Leroy, Alex Aiken
In 2016, there were 7 publications by 6 experts: Shmuel Sagiv, David Walker, Frank Pfenning, Matthias Felleisen,
Andrew D. Gordon, Thomas W. Reps

In 2017, there were 4 publications by 3 experts: Benjamin C. Pierce, Robert Harper 0001, Thomas W. Reps

10 out of the 20 experts published at this conference in 1 or more years  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

 ${\tt 3}$  out of the  ${\tt 20}$  experts published at this conference in  ${\tt 2}$  or more years

WPP Report: http://portal.core.edu.au/core/media/conf\_rank\_report/higherrank1436\_top\_people\_report.txt Graphs: http://portal.core.edu.au/core/media/conf\_rank\_graphs/higherrank1436\_top\_people\_graph.png



# Other Information

### **Comparator Comparison**

#### Comparator

ACM-SIGPLAN Conference on Programming Language Design and Implementation

Explanation as to why conference is superior to comparator:

PLDI and POPL are the two oldest conferences in Programming Languages (with PLDI dating back to 1979, and POPL dating back to 1973). The two conferences have significant overlap, and many top people in PL have published in both. But they nevertheless have somewhat different emphases, with POPL focusing more on PL theory, foundations, formal semantics, and verification, and PLDI focusing more on practically-minded, empirical methods.

Comparing the two conferences quantitatively: POPL has a slightly higher h5-index than PLDI according to Google Scholar (48 vs. 46, and in fact this is under-reporting POPL's h5-index since it doesn't count POPL papers published since 2018 in PACMPL – see note in F.2).

Link to comparator report:

http://portal.core.edu.au/core/media/conference\_submission\_2020/Data\_Comparator\_for\_1436\_496.pdf

### Comparator

Computer Aided Verification

Explanation as to why conference is superior to comparator:

CAV and POPL are two of the top conferences for research in program verification. Compared to POPL, CAV is more narrowly focused on automated verification and is more heavily tool-oriented, whereas POPL is a much broader conference, covering all foundational aspects of PL.

Comparing the two conferences quantitatively: POPL has a higher h5-index than CAV according to Google Scholar (48 vs. 38, and in fact this is under-reporting POPL's h5-index since it doesn't count POPL papers published since 2018 in PACMPL – see note in F.2). Link to comparator report:

http://portal.core.edu.au/core/media/conference\_submission\_2020/Data\_Comparator\_for\_1436\_656.pdf

#### Other Relvant Info

Other relevant information: Some of the data included in other parts of this submission (particularly the WPP reports) are fundamentally incorrect or skewed because, since 2018, the proceedings of POPL have been published (along with that of ICFP and SPLASH/OOPSLA) in the new journal PACMPL.

In this section, we thus provide corrected data for the PACMPL conferences.

Before presenting this data, we first wish to emphasize that, despite the transition to publication in PACMPL, POPL has remained for all intents and purposes the same conference it was before. The switch to PACMPL has not caused any change to the quality of papers at the conference itself, except insofar as all POPL papers now undergo the more rigorous process of two-phase review (as required by PACMPL).

Moreover, since PACMPL is not currently CORE-ranked, we believe it would be a serious problem for POPL authors if POPL were to be simply re-categorized as "journal-published". We therefore request that, at least until PACMPL is CORE-ranked, the idea of removing POPL from the CORE conference ranking should be taken off the table.

Now, to solidify the case for maintaining POPL's A\* ranking beyond the data presented earlier in the submission, we provide here some additional supporting data, which corrects errors and limitations of the data provided by Google Scholar and the WPP reports.

First, we note that the h5-index for POPL reported by Google Scholar ignores all POPL papers published since 2018 since that is when POPL joined PACMPL. If the papers since 2018 are included in the calculation of the Google Scholar h5-index, it should in fact be 50, not 48 (we have computed this manually). This is yet higher than that of of the compararor conferences PLDI (46) and CAV (38).

Next, in the interest of correcting the data automatically collected by the WPP tool, we are attaching three relevant files.

1. The first two files provide corrected data for the three conferences published in PACMPL (ICFP, SPLASH/OOPSLA, and POPL) for the period 2015-2020. The first file is a spreadsheet, and the second file provides updated bar graphs for the PACMPL conferences (of the form returned by the WPP tool).

For each of the various lists of people considered in the submission, namely – the "20 Top Experts" list (D.2), the 2019 senior PC lists for POPL, and the 2019 senior PC lists for the comparator conferences (PLDI and CAV) – the spreadsheet reports accurate information on how many papers each person on the list published in the respective conference in each year (regardless of whether the conference was published with standalone proceedings or in PACMPL). This data was compiled from DBLP/CSrankings.

The spreadsheet also contains the total # of publications co-authored by members of the various lists in the various conferences (see the row labeled "TOTAL UNIQUE"), as well as (at the bottom of each spreadsheet) the number of list members who published in N of the last years of the conference, for N in 1..6. The latter was used to produce the updated bar graphs shown in the second file.

We observe that for the "20 Top Experts" list, although the total # of publications by top experts was lower in POPL than in PLDI (31 vs. 38), the # of top experts who published in POPL was slightly higher: 14 of the top experts published in POPL during 2015-2020, vs. 13 for PLDI.

Thus, if the WPP tool had had access to the full information about all POPL publications in 2015-2020 including those in PACMPL, the bar graph for POPL would have been displayed first (before the one for PLDI).

2. The second file displays data (collected from Google Scholar) on the citation metrics of POPL in comparison with seven other top conferences that researchers in Programming Languages (very broadly construed) publish in: PLDI, OOPSLA, ICFP, FSE, ICSE, LICS, and CAV (all currently ranked as A\*).

We make the following observations about this data, which covers the years 2015-2019:

- For 2015, the median citation count of POPL is essentially the same as that of PLDI (35 vs. 35.5), and higher than that of any of the other conferences.
- For 2017-2019, the median citation count of POPL is higher than that of any of the other conferences.
- For all but one year (2017), the top-cited one or two papers at POPL have more citations than any papers in PLDI or CAV that year.
- For 2016 and 2019, the top-cited paper one or two papers at POPL have more citations than any papers in any of the other conferences that year.

Of course, citation counts are but one metric of impact, but we believe the data supports the claim that POPL should indeed continue to be ranked as an A\* conference.

### **Attachments**

 $\verb|http://portal.core.edu.au/core/media/request_attachment/PACMPL-data.pdf|$ 

http://portal.core.edu.au/core/media/request\_attachment/corrected-graphs\_jLI81Wf.pdf http://portal.core.edu.au/core/media/request\_attachment/median-comparison\_SNQOMvn.pdf

**Proposers** 

First name: Derek Last name: Dreyer

Affiliation: Max Planck Institute for Software Systems (MPI-SWS)

Email: dreyer@mpi-sws.org

### Submitted By

Name: Dreyer Derek Email: dreyer@mpi-sws.org