

Submission data for 2023 CORE conference ranking process International Symposium on Computational Geometry

Anne Driemel

Introductory Questions

Conference

Title: International Symposium on Computational Geometry Acronym : SoCG Rank: A

Requested Rank

Rank: A*

Conference Details

Month: June Publisher: Leibniz International Proceedings in Informatics (LIPIcs) Bi-annual: False Multiconference: False Component in a multi-conference or umbrella event: True Has separate proceedings: True Colocated with other events: True Colocated event description: CGWeek Event relationship description: CGWeek is an umbrella event that includes satellite workshops and YRF (Young Researchers Forum) as well as SoCG Alternative content: True Alternative content description: Full papers, Media Exposition, CG Challenge

Proceedings Publishing Style

Proceedings Publishing: other Link to most recent proceedings: https://drops.dagstuhl.de/opus/portals/lipics/index.php?semnr=16228 Further details: SoCG was founded as an ACM conference and only recently went independent. This was a decision by the community that was driven by several different factors, including the strong desire to have open-access proceedings. Up until 2015, SoCG proceedings were published by ACM. In 2014 the community voted to leave the ACM [1]. Since 2015, SoCG proceedings are published open source with LIPICS [2]. [1] https://www.computational-geometry.org/about_acm_affiliation.html [2] https://www.dagstuhl.de/en/publishing/series/details/LIPIcs

Most Recent Years

Most Recent Year

Year: 2023 URL: https://cs.utdallas.edu/SOCG23/socg.html Location: Dallas, US Papers submitted: 175 Papers published: 61 Acceptance rate: 35 Source for numbers: https://www.computational-geometry.org/documents/SoCG39_data.pdf

General Chairs

No General Chairs

Program Chairs

Name: Erin Chambers Affiliation: Saint Louis University Gender: F H Index: 18 GScholar url: https://scholar.google.de/citations?user=3JRh4RUAAAAJ&hl=de&oi=ao DBLP url: https://dblp.org/pid/06/3707.html Name: Joachim Gudmundsson Affiliation: Uniersity of Sydney Gender: M H Index: 41 GScholar url: https://scholar.google.de/citations?user=uECC9_gAAAAJ&hl=de&oi=ao DBLP url: https://dblp.org/pid/55/5525.html

Second Most Recent Year

Year: 2022 URL: https://www.inf.fu-berlin.de/inst/ag-ti/socg22/ Location: Berlin, Germany Papers submitted: 174 Papers published: 64 Acceptance rate: 37 Source for numbers: https://www.computational-geometry.org/business-meetings/2022/2022_PC.pdf

General Chairs

No General Chairs

Program Chairs

Name: Xavier Goaoc
Affiliation: Université de Lorraine, France
Gender: M
H Index: 17
GScholar url:
DBLP url: https://dblp.org/pid/73/5116.html
Name: Michael Kerber
Affiliation: TU Graz, Austria
Gender: M
H Index: 25
GScholar url: https://scholar.google.com/citations?user=Ue-ElbUAAAAJ&hl=en
DBLP url: https://dblp.org/pid/76/4651.html

Third Most Recent Year

Year: 2021 URL: https://cse.buffalo.edu/socg21/ Location: Buffalo, New York Papers submitted: 164 Papers published: 58 Acceptance rate: 35 Source for numbers: https://www.computational-geometry.org/business-meetings/2021/2021_PC.pdf

General Chairs

No General Chairs

Program Chairs

Name: Kevin Buchin
Affiliation: TU Eindhoven, Netherlands
Gender: M
H Index: 34
GScholar url: https://scholar.google.com/citations?user=sNa1oWcAAAAJ&hl=en
DBLP url: https://dblp.org/pid/50/165.html
Name: Éric Colin de Verdière
Affiliation: CNRS, LIGM, Marne-la-Vallée, France
Gender: M
H Index: 18
GScholar url:
DBLP url: https://dblp.org/pid/v/EricColindeVerdiere.html

Policies

Chair Selection: The computational geometry steering committee (SC) is elected by the scientific community. The SC coordinates bids for the organization of the conferences for the years ahead and appoints the PC chairs. The selection is done based on a number of criteria, such as scientific quality of the researcher, academic seniority, and a demonstrated committment, integrity and reliability. In addition, the SC strictly avoids repetition of the same person appointed as PC chair in different years. Policy name: Code of Conduct

Policy url: https://www.computational-geometry.org/codeofconduct.html Policy name: Double-Blind Reviewing Policy url: https://www.computational-geometry.org/documents/Double_blind_proposal.pdf

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Program Committee

Link to pc: https://www.inf.fu-berlin.de/inst/ag-ti/socg22/socg.html File: http://portal.core.edu.au/core/media/2023/pc_members/PC_SoCG_2022_ohaYKu4.txt H-index plot: http://portal.core.edu.au/core/media/2023/pc_graphs/higherrank_hindex_buckets_2154.png

Information contained within these graphs is derived using the Elsevier Scopus Database 2023. Scopus h-index is generally about 30% lower than Google Scholar h-index.





Publishing of established researchers in the PC

http://portal.core.edu.au/core/media/2023/conf_submissions_clean_spc/higherrank2154_spc_report.csv WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/WbxVyjA8.txt

1. International Symposium on Computational Geometry (SoCG) Core Rank: A

This venue was published at 24 times by 9 of 9 individuals in the last 5+ years.

The individuals that publish at this venue are: Herbert Edelsbrunner(5), Michael Kerber(4), Andreas Wiese(3), Yakov Nekrich(3), Aleksandar Nikolov(2), Chee-Keng Yap(2), Emo Welzl(2), Marc J. van Kreveld(2), Carola Wenk(1) In 2018, there were 3 publications by 2 individuals: Herbert Edelsbrunner, Marc J. van Kreveld In 2019, there were 6 publications by 5 individuals: Aleksandar Nikolov, Chee-Keng Yap, Herbert Edelsbrunner, Michael Kerber, Yakov Nekrich In 2020, there were 8 publications by 6 individuals: Andreas Wiese, Carola Wenk, Emo Welzl, Marc J. van Kreveld, Michael Kerber, Yakov Nekrich In 2021, there were 6 publications by 4 individuals: Aleksandar Nikolov, Andreas Wiese, Herbert Edelsbrunner, Michael Kerber In 2022, there were 1 publications by 1 individuals: Chee-Keng Yap

9 out of the 9 individuals published at this venue in 1 or more years 7 out of the 9 individuals published at this venue in 2 or more years 2 out of the 9 individuals published at this venue in 3 or more years

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Top People Involvement

name: Micha Sharir

h-index: 93

Google Scholar URL: https://scholar.google.de/citations?user=jnEtxm4AAAAJ&hl=de&oi=ao Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- Alicia and Isaias Nizri Chair in Computational Geometry and Robotics, Tel Aviv University
- co-founder of the Minerva Center for Geometry at Tel Aviv University.

HONORARY TITLES (FELLOWS, AWARDS, ETC),

- Max-Planck research prize (1992, jointly with Emo Welzl),
- honorary doctorate degree from the University of Utrecht (1996)
- a Fellow of the ACM (since 1997)
- the Feher Prize (1999),
- the Mif'al Hapais' Landau Prize (2002)
- EMET Prize (2007).
- incumbent of the Nizri Chair in computational geometry and robotics,
- member of the Israeli Academy of Sciences and Humanities (2018).

JOURNAL EDITORSHIP,

 Editorial board Discrete & Computational Geometry SOURCES

- http://www.cs.tau.ac.il/~michas/bio.txt - https://en.wikipedia.org/wiki/Micha_Sharir

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	2	4	3	2

Attendance: Almost always (>80% of the time)

name: Herbert Edelsbrunner

h-index: 90

Google Scholar URL: https://scholar.google.de/citations?user=I_dlxWcAAAAJ&hl=de&oi=ao Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- 2009 — present Professor, Institute of Science and Technology Austria (ISTA)

HONORARY TITLES (FELLOWS, AWARDS, ETC)

- 2009 member of the Academia Europaea

- 2018 Wittgenstein Award
- 2014 Fellow of the European Association for Theoretical Computer Science
- 2014 Member, Austrian Academy of Sciences (ÖAW)
- 2012 Corresponding Member of the Austrian Academy of Sciences
- 2008 Member, German Academy of Sciences Leopoldina
- 2006 Honorary Doctorate, Graz University of Technology
- 2005 Member, American Academy of Arts and Sciences

- 1991 Alan T. Waterman Award, National Science Foundation

STEERING/ADVISORY COMMITTEE MEMBERSHIP (PAST, CURRENT)

- Socg steering committee (1994-1997) (1997-1999)

- Steering committee Applied and Computational Algebraic Topology

JOURNAL EDITORSHIP

- Series editor of Geometry and computing https://www.springer.com/series/7580/editors SOURCES

-https://en.wikipedia.org/wiki/Herbert_Edelsbrunner

- https://www.leopoldina.org/fileadmin/redaktion/Mitglieder/CV_Edelsbrunner_Herbert_D.pdf Paper counts:

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

Attendance: Sometimes (20-50% of the time)

name: Pankaj K. Agarwal

h-index: 82

Google Scholar URL: https://scholar.google.com/citations?hl=de&user=xeOeVksAAAAJ

Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- 2008 RJR Nabisco Professorship, Duke University

- 1998- Professor, Department of Computer Science, Duke University

HONORARY TITLES (FELLOWS, AWARDS, ETC),

- 2002 ACM Fellow
- 2000 Member, Bass Society of Fellows
- 1996 Alfred P. Sloan Fellow
- 1993 National Young Investigator Award
- 1989 Janet Fabri Award (best PhD thesis)

STEERING/ADVISORY COMMITTEE MEMBERSHIP

- Socg steering committee(1999-2001), secretary
- Socg steering committee, (2003-2006), chair
- Socg steering committee, (2006-2009)
- JOURNAL EDITORSHIP,
- Editor Journal of the ACM
- Editorial board: Discrete & Computational Geometry
- Advisory Board Member: CGTA

– Senior Associate Editors: ACM Transactions on Spatial Algorithms and Systems SOURCES

-https://en.wikipedia.org/wiki/Pankaj_K._Agarwal

- https://medarbejdere.au.dk/en/strategy/recurring-events/the-annual-celebration/honorary-doctorates/ professor-pankaj-k-agarwal

Paper counts:

		minu most recent.	Fourth most recent.	Fillin most recent.
2	1	0	1	3

Attendance: Almost always (>80% of the time)

name: Erik D. Demaine h-index: 77 Google Scholar URL: https://scholar.google.com/citations?hl=de&user=6Ff2c8wAAAAJ

Justification: ACADEMIC POSITIONS AND AFFILIATIONS

 – July 2011–present Professor, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology HONORARY TITLES (FELLOWS, AWARDS, ETC)

- 2003 MacArthur Fellowship
- 2013 EATCS Presburger Award for young scientists.
- 2013 fellowship by the John Simon Guggenheim Memorial Foundation.
- 2015 Nerode Prize
- 2016 ACM- fellow
- 2017 honorary doctorate by Bard College

STEERING/ADVISORY COMMITTEE MEMBERSHIP (PAST, CURRENT)

- Co-president of board, Gathering for Gardner Foundation (2016–2020)

- Advisory board, Museum of Mathematics (2011-present)

- Support Board, Center for Graduate Education Initiative, Japan Advanced Institute of Science and Technology (2010-present) JOURNAL EDITORSHIP,

- Editorial board, Journal of Mathematics and the Arts, 2014-present.

- Editorial board, Journal of Computational Geometry, 2009-2012.

- Editorial board, Discrete & Computational Geometry, 2006-present.

SOURCE

- https://erikdemaine.org/cv.pdf

Paper counts:

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

Attendance: Often (50-80% of the time)

name: Subhash Suri

h-index: 75

Google Scholar URL: https://scholar.google.com/citations?hl=en&user=-w4NhEsAAAAJ

Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- Distinguished Professor, Department of Computer Science, UC Santa Barbara, 2013-Present.
- Professor, Department of Computer Science, UC Santa Barbara, 2000-Present.
- Director, Center for Geometric Computing, UC Santa Barbara, 2011-Present

HONORARY TITLES

- Distinguished Alumnus Award, Indian Institute of Technology, Roorkee, 2019.
- Fellow of American Association for the Advancement of Science (AAAS), 2011

- Fellow of ACM, 2010.

- Fellow of IEEE, 2009.
- ACM Distinguished Scientist, 2007.

- Cray Distinguished Lecture, Department of Computer Science, Univ. of Minnesota, 2013.

STEERING/ADVISORY COMMITTEE MEMBERSHIP (PAST, CURRENT),

Advisory Board, Computer Science Department, Hong Kong University of Science and Technology, 2014–2017
JOURNAL EDITORSHIP

- Editor, Computational Geometry: Theory and Applications, 1999-2019.

- Editor, ACM Transactions on Sensor Network, 2006-2012.

- Editor, International Journal of Foundations of Computer Science, 2008-2012.

SOURCES

- https://sites.cs.ucsb.edu/~suri/cv.pdf

Paper counts:

			· - ·	
Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	1	0	1	0
0	1	0	1	0
Attendance: Oft	en (50-80% of the time)		*	

name: David Eppstein

h-index: 73

Google Scholar URL: https://scholar.google.de/citations?user=QSY7ufMAAAAJ&hl=de&oi=ao Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- Distinguished Professor, Computer Science Department, University of California, Irvine,
- Director of the Center for Algorithms and Theory of Computation,
- Associate Director of the Center for Algorithms, Combinatorics, and Optimization.
- HONORARY TITLES (FELLOWS, AWARDS, ETC),
- National Merit Scholarship, 1981-1984.
- NSF Graduate Fellowship, 1984-1987.
- NSF Young Investigator Award, 1992-1999.
- Dean's Award for Research, Donald Bren School of Information and Computer Sciences, UC Irvine, 2011.
- Fellow of the Association for Computing Machinery, 2012.
- Fellow of the American Association for the Advancement of Science, 2017.

- Dean's Excellence in Research Award, Donald Bren School of Information and Computer Sciences, UC Irvine, 2021.

STEERING/ADVISORY COMMITTEE MEMBERSHIP (PAST, CURRENT)

– ESA (2008 - 2012)

- Graph drawing (2012-2014)

– SoCG (2013-2016)

- Moderator for cs.DS (data structures and algorithms), arxiv.org electronic preprint repository, 2006-present; member of arXiv scientific advisory board, 2016-2019.

- Administrator on English-language Wikipedia, 2007-present.

JOURNAL EDITORSHIP

- Founding co-Editor-in-chief: Computing in Geometry and Topology, 2022-present

- Editorial boards: J. Algorithms, 1994-2004; Chicago J. Theor. Comp. Sci., 1994-present; SIAM J. Comput., 1995-2004; J. Graph Algorith. & Appl., 1995-2009. ACM Trans. Algorith., 2004-2008.

SOURCES

-https://www.cgt-journal.org/index.php/cgt/about/editorialTeam

- https://www.ics.uci.edu/~eppstein/vita.pdf

Paper counts:

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

Attendance: Almost always (>80% of the time)

name: Jean-Daniel Boissonat

h-index: 61

Google Scholar URL: https://scholar.google.de/citations?user=aIdmsqYAAAAJ&hl=de&oi=ao Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- research director at INRIA, the French Research Institute of Computer Science and Applied Mathematics.

- Holds 3IA Côte d'Azur chair.

- invited professor at the Collège de France on the Chair Informatics and Computational Sciences (2016-2017).

HONORARY TITLES (FELLOWS, AWARDS, ETC),

- IBM award in Computer Science, 1987

- EADS award in Information Sciences, 2006

– grand prix ANR du numérique, 2013.

- chevalier de l'Ordre National du Mérite

STEERING/ADVISORY COMMITTEE MEMBERSHIP (PAST, CURRENT)

- member of the scientific council of the Ecole Normale Supérieure in Lyon

- chair of evaluation committee of Inria

- member of the council of the AERES (the french agency for the evaluation of research and high level education).

JOURNAL EDITORSHIP

- associate editor of the Journal of the ACM

- associate editor of Discrete and Computational Geometry

- former editorial boards of Algorithmica, Journal of Computational Geometry (JCG) and Computational Geometry, Theory and

Applications (CGTA).

SPECIAL ACHIEVEMENTS

- development of the Computational Geometry Algorithms Library (CGAL) which has significantly contributed to the influence and impact of computational geometry among the sciences. CGAL is nowadays used worldwide for teaching, research and is at the heart of industrial applications.

SOURCES

- https://www-sop.inria.fr/members/Jean-Daniel.Boissonnat/

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

Attendance: Sometimes (20-50% of the time)

name: János Pach

h-index: 58

Google Scholar URL: https://scholar.google.de/citations?user=uOC_Z8QAAAAJ&hl=de&oi=ao Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- Research Professor, Alfréd Rényi Institute of Mathematics of the Hungarian Academy of Sciences

- Research Professor at the Courant Institute of Mathematical Sciences at NYU (since 1986),

HONORARY TITLES (FELLOWS, AWARDS, ETC),

- Grunwald Medal, Bolyai Mathematical Society, 1982

- Ford Award, Mathematical Association of America, 1990
- Renyi Award, Hungarian Academy of Sciences, 1993
- Academy Award, Hungarian Academy of Sciences, 1998

- ACM Fellow, 201

- International Congress of Mathematicians, Seoul, Invited Speaker, 2014

- Academia Europaea, Member, 2014

- AMS Fellow, 2015

- elected Member of Hungarian Academy of Sciences, 2022
- Szele Memorial Prize, Bolyai Mathematical Society, 2019

JOURNAL EDITORSHIP

- co-editor-in-chief of the journal Discrete and Computational Geometry,

– editorial boards of Combinatorica, Computational Geometry: Theory and Applications, Discrete and Computational Geometry, Geombinatorics, Graphs and Combinatorics, SIAM Journal of Discrete Mathematics (SIAM), Applied Mathematics Research eXpress (-2017) (Oxford), International Journal of Computer Mathematics (Taylor & Francis), Central European Journal of Mathematics (-2014) (Springer), European Journal of Mathematics (2014-) (Springer), Moscow Journal of Combinatorics and Number Theory In Journal of Computational Geometry (Open access), Mathematical Intelligencer (correspondent) (Springer), Studia Scientiarum Mathematicarum Hungarica, De Gruyter Series in Discrete Mathematics and Appls

- https://de.wikipedia.org/wiki/J%C3%A1nos_Pach

-https://math.nyu.edu/~pach/

Paper counts:

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

Attendance: Often (50-80% of the time)

name: Tamal K. Dey h-index: 58

Google Scholar URL: https://scholar.google.com/citations?hl=de&user=k7VhUnAAAAAJ

Justification: ACADEMIC POSITIONS AND AFFILIATIONS

– Professor (2020–), Computer Science, Purdue University

HONORARY TITLES (FELLOWS, AWARDS, ETC)

- 2018 ACM Fellow,

- IEEE Fellow,
- SMA Fellow,

- Lumley research awardee,

STEERING/ADVISORY COMMITTEE MEMBERSHIP (PAST, CURRENT)

- Steering Committee 11th Meshing Roundtable 2002

- Advisory Committee International Symposium on Voronoi Diagrams in Science and Engineering

JOURNAL EDITORSHIP

- Editorial Board: Discrete & Computational Geometry

- Editorial Board: Computational Geometry Theory & Applications

- Past: Journal of Comput. Geom., Graphical Models, CAD

SOURCES

- https://www.cs.purdue.edu/homes/tamaldey/

- https://www.cs.purdue.edu/homes/tamaldey/cv.pdf

Paper counts:

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

Attendance: Almost always (>80% of the time)

name: Timothy M. Chan

h-index: 53

Google Scholar URL: https://scholar.google.de/citations?hl=de&user=CiesWGcAAAAJ

Justification: ACADEMIC POSITIONS AND AFFILIATIONS

- Founder Professor in the Department of Computer Science at the University of Illinois at Urbana-Champaign.

HONORARY TITLES (FELLOWS, AWARDS, ETC),

- Governor General's Gold Medal (as Head of Graduating Class in the Faculty of Graduate Studies at the University of British Columbia during convocation)

- NSERC doctoral prize,

- Premier's Research Excellence Award (PREA) of Ontario, Canada

- 2019 ACM Fellow in 2019 "for contributions to computational geometry, algorithms, and data structures".

JOURNAL EDITORSHIP

- Associate editor for SIAM Journal on Computing

- Associate editor for International Journal of Computational Geometry and Applications

 Editorial boards: Algorithmica, Discrete and Computational Geometry, Computational Geometry: Theory and Applications SOURCES

-https://en.wikipedia.org/wiki/Timothy_M._Chan,

- http://tmc.web.engr.illinois.edu/

Paper counts:

		mina most recent.	Fourth most recent:	Fifth most recent:
2	0	2	2	3

Attendance: Almost always (>80% of the time)

Area Leaders publishing

Method of selection: We used Google Scholar as described above with keyword "computational_geometry". Keyword: computational geometry

name	h-index	gscholar url
Micha Sharir	93	https://scholar.google.de/citations?hl=en&user=jnEtxm4AAAAJ
Herbert Edelsbrunner	90	https://scholar.google.com/citations?hl=de&user=I_dlxWcAAAAJ
Ivan Stojmenovic	87	https://scholar.google.com/citations?hl=de&user=AFHvuhMAAAAJ
Piotr Indyk	82	https://scholar.google.de/citations?user=oOwNKsAAAAAJ&hl=de&oi=ao
Pankaj K. Agarwal	82	https://scholar.google.com/citations?hl=de&user=xeOeVksAAAAJ
Benjamin Blankertz	77	https://scholar.google.com/citations?hl=de&user=BQitzAIAAAAJ
Erik Demaine	77	https://scholar.google.com/citations?hl=de&user=6Ff2c8wAAAAJ
Bernard Chazelle	77	https://scholar.google.de/citations?hl=en&user=C1VwgssAAAAJ
Kurt Mehlhorn	76	https://scholar.google.com/citations?hl=de&user=28CWXPUAAAAJ
Subhash Suri	75	https://scholar.google.com/citations?hl=en&user=-w4NhEsAAAAJ
Michael T. Goodrich	73	https://scholar.google.com/citations?hl=de&user=sSS9gSoAAAAJ
David Eppstein	73	https://scholar.google.de/citations?user=QSY7ufMAAAAJ&hl=de&oi=ao
Joseph SB Mitchell	72	https://scholar.google.com/citations?hl=de&user=KICA5DoAAAAJ
Jean-Daniel Boissonnat	61	https://scholar.google.com/citations?hl=de&user=aIdmsqYAAAAJ
Jon Louis Bentley	60	https://scholar.google.com/citations?hl=de&user=AFHvuhMAAAAJ
Gautam Das	60	https://scholar.google.com/citations?hl=de&user=oleB9xIAAAAJ
Jack Snoeyink	60	https://scholar.google.com/citations?hl=de&user=fIoDWp8AAAAJ
Robert J. Lang	59	https://scholar.google.com/citations?hl=en&user=IOViVc4AAAAJ
Stephen Kobourov	59	https://scholar.google.com/citations?hl=en&user=P21gHIkAAAAJ
Janos Pach	58	https://scholar.google.de/citations?hl=de&user=uOC_Z8QAAAAJ
Tamal K. Dey	58	https://scholar.google.com/citations?hl=de&user=k7VhUnAAAAAJ
Nancy Amato	58	https://scholar.google.com/citations?hl=en&user=AmaB9c4AAAAJ
Marshall Bern	57	https://scholar.google.com/citations?hl=de&user=rGS1KaAAAAAJ
Chee Yap	54	https://scholar.google.com/citations?hl=en&user=zO6kmIAAAAAJ
Timothy M. Chan	53	https://scholar.google.com/citations?hl=en&user=CiesWGcAAAAJ
Sariel Har-peled	52	https://scholar.google.com/citations?user=2s9_ZWgAAAAJ
Sándor P. Fekete	52	https://scholar.google.com/citations?hl=en&user=VBIx-BsAAAAJ
Suresh Venkatasubramanian	51	https://scholar.google.com/citations?hl=de&user=ZO3FLwkAAAAJ
R. van de Weygaert	51	https://scholar.google.com/citations?hl=en&user=B9ibTVkAAAAJ
Marc van Kreveld	50	https://scholar.google.com/citations?hl=de&user=Q_d-OKAAAAAJ
Yongjie Jessica Zhang	50	https://scholar.google.com/citations?hl=en&user=dzHYBKcAAAAJ
Joseph O' Rourke	49	https://scholar.google.com/citations?hl=en&user=AdrTURsAAAAJ
George Nagy	49	https://scholar.google.com/citations?hl=en&user=MKJ9k84AAAAJ
Leo Joskowicz	49	https://scholar.google.com/citations?hl=en&user=PoyxglsAAAAJ
Dan Halperin	49	https://scholar.google.com/citations?hl=en&user=2-e0jiEAAAAJ
Ayellet Tal	46	https://scholar.google.com/citations?hl=en&user=eFGgX-QAAAAJ
Mark de Berg	45	https://scholar.google.com/citations?hl=en&user=4CObfMYAAAAJ
Raimund Seidel	45	https://scholar.google.com/citations?hl=en&user=LyGtZIkAAAAJ

WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/OUs61Gkr.txt

International Symposium on Computational Geometry (SoCG)
Core Rank: A

This venue was published at 89 times by 16 of 29 individuals in the last 5+ years.

The individuals that publish at this venue are: Sandor P. Fekete(13), Micha Sharir(11), Timothy M. Chan(11), Sariel Har-Peled(8), Janos Pach(7), Jean-Daniel Boissonnat(7), Tamal K. Dey(7), Pankaj K. Agarwal(6), Herbert Edelsbrunner(5), Mark de Berg(5), Erik D. Demaine(4), Dan Halperin(3), David Eppstein(3), Chee Yap(2), Marc J. van Kreveld(2), Subhash Suri(2)

In 2018, there were 16 publications by 9 individuals: Erik D. Demaine, Herbert Edelsbrunner, Janos Pach, Jean-Daniel Boissonnat, Marc J. van Kreveld, Pankaj K. Agarwal, Sandor P. Fekete, Tamal K. Dey, Timothy M. Chan In 2019, there were 19 publications by 11 individuals: Chee Yap, Dan Halperin, David Eppstein, Herbert Edelsbrunner, Janos Pach, Jean-Daniel Boissonnat, Micha Sharir, Pankaj K. Agarwal, Sandor P. Fekete, Sariel Har-Peled, Timothy M. Chan

In 2020, there were 23 publications by 12 individuals: Erik D. Demaine, Janos Pach, Jean-Daniel Boissonnat, Marc J. van Kreveld, Mark de Berg, Micha Sharir, Pankaj K. Agarwal, Sandor P. Fekete, Sariel Har-Peled, Subhash Suri, Tamal K. Dey, Timothy M. Chan

In 2021, there were 19 publications by 12 individuals: Dan Halperin, David Eppstein, Erik D. Demaine, Herbert Edelsbrunner, Janos Pach, Jean-Daniel Boissonnat, Mark de Berg, Micha Sharir, Sandor P. Fekete, Sariel Har-Peled, Tamal K. Dey, Timothy M. Chan In 2022, there were 12 publications by 11 individuals: Chee Yap, Dan Halperin, Erik D. Demaine, Janos Pach, Mark de Berg, Micha Sharir, Pankaj K. Agarwal, Sandor P. Fekete, Sariel Har-Peled, Subhash Suri, Tamal K. Dey

16 out of the 29 individuals published at this venue in 2 or more years 12 out of the 29 individuals published at this venue in 3 or more years 9 out of the 29 individuals published at this venue in 4 or more years 2 out of the 29 individuals published at this venue in 5 or more years

Additional Data

Google Scholar Data

Sub-category url: https://scholar.google.com.au/citations?view_op=top_venues&hl=en&vq=eng_theoreticalcomputerscience Position in sub-category: 20+ h5 index of 20th item in category: 22 h5 index for this conference: 22

Relationship to similar conferences

Partial ordering of similar conferences in the area, with argument as to where the current venue fits and why:

Computational geometry is a thriving field with a large research community and lots of activities. SoCG is considered the premier conference in this field. There are several other annual CG events, including less competitive conferences (EuroCG and CCCG), the fall workshop, a biannual Dagstuhl seminar, regular international seminars, such as the NYC Geometry Seminar, the French, the Spanish, the Japanese workshops, and more. CGWeek is an umbrella event that includes SoCG and several other events, such as Young Researchers Forum (YRF) and satellite workshops.

There are several other broader conferences, in which, traditionally, a significant portion of the papers can be classified as CG papers. However, many CG researchers prefer to send their best papers to SoCG rather than, e.g., SODA to maximize visibility within the CG community. In effect, the best CG papers from SODA (which is ranked A*) are not necessarily the best papers in CG. Therefore, many CG researchers consider SoCG and SODA to be on the same level.

Concretely, we name 7 conferences in the area of algorithms and put them into perspective with respect to SoCG:

SODA: CORE-rank: A*, H5-index: 57, acceptance rate: 31, 6

ICALP: CORE-rank: A, H5-index: 32, acceptance rate: 29, 6

ESA: CORE-rank: A, H5-index: 22, acceptance rate: 25, 2

STACS: CORE-rank: A, H5-index: 20, acceptance rate: ?

APPROX: CORE-rank: A. H5-index: 19, acceptance rate: 50

MFCS: CORE-rank: A, H5-index: 18, acceptance rate: ?

ISAAC: CORE-rank: A, H5-index: 13, acceptance rate: ?

For comparison, SoCG: CORE-rank A. H5-index: 22. acceptance rate: 35, 2

- SODA and ICALP are considered similar in strength to SoCG by many for the reasons mentioned above.
- ESA is considered similar in strength to SoCG by some and weaker by others.
- ISAAC, MFCS, and STACS each clearly considered weaker than SoCG.

- SODA, ICALP, ESA, ISAAC, MFCS, and STACS are each much broader in scope than SoCG.

- APPROX is considered weaker than SoCG by many. It is also narrower in scope than SoCG.

In addition, we name 3 conferences in the general area of theoretical computer science, which are similar in size to SoCG and similar acceptance rate and H5-index, but these conferences are ranked higher than SoCG:

CAV: CORE-rank: A*, H5-index: 39, acceptance rate: 31, 9

LICS: CORE-rank: A*, H5-index: 32, acceptance rate: 33, 6

KR: CORE-rank: A*, H5-index: 17, acceptance rate: 28, 4

- CAV, LICS, and KR have a different focus and are therefore not compared to SoCG by the community.

As a source for H5-index we used google scholar. As source for the acceptance rate we used the average computed over the numbers available on www.openresearch.org.

We would like to point out the the H5-index is not an adequate way for measuring the impact of a conference like SoCG. The best papers from SoCG will be accepted to A* journals, but the citations to the journal version of a SoCG paper are not counted towards the H5-index of SoCG, neither are citations to full versions that appear on arXiv counted. Many authors prefer to cite the full version, but these citations remain uncounted.

This deficiency does not affect all conferences in the same way. For example, the papers accepted to SIGGRAPH and VLDB appear in a full journal format and therefore do not suffer from this split of citation count. Even within theoretical computer science, conferences are not affected equally. The proceedings of SODA leave more space to fit a full version of a paper, which often makes it unnecessary to send the paper to a journal after publication at SODA.

In addition, the 5-year cutoff seems ill-suited as it does not measure long-term impact. Our analysis of a sample of highly cited SoCG papers showed that the H5-citation count makes up roughly about 10% of the long term count. This differs substantially from areas like Computer Graphics, Artificial Intelligence, Robotics, which typically hit their max within the first 5-6 years, but get about 35% of their citations in that time.

Using the data provided by google scholar we determined that the H-index of SoCG is at least 140.

Other Information

Other Relvant Info

Other relevant information: SoCG is considered the premier conference in the area of computational geometry. Computational geometry is a vibrant and mature field of research, with several dedicated international conferences and journals and strong intellectual connections with other computing and mathematics disciplines.

SoCG was founded as an ACM conference and only recently went independent. This was a decision by the community that was driven by several different factors, including the strong desire to have open-access proceedings. SoCG has been an invited conference at FCRC on multiple occasions and was co-located with STOC in 2016.

There are several international journals dedicated to computational geometry:

Discrete & Computational Geometry (Springer),

Computational Geometry -Theory and Applications (Elsevier),

International Journal of Computational Geometry & Applications (World Scientific).

In addition, there are several newly founded peer-reviewed scientific journals that provide diamond open access:

Journal of Computational Geometry (JoCG),

Computing in Geometry and Topology (CGT).

SoCG papers are regularly featured in journals of the broader area of algorithms:

Journal of the ACM (J.ACM),

SIAM Journal of Computing (SICOMP),

Algorithmica,

Theoretical Computer Science (TCS).

Best papers in SoCG are automatically invited to J.ACM. The editorial boards of these journals often include several members of the CG community. The SICOMP editorial board currently includes Yusu Wang and Mark de Berg. The editorial board of the JACM includes Pankaj Agarwal.

We analyzed this throughput based on a sample of 94 SoCG papers from the time before best papers from SoCG were automatically invited to J.ACM:

36 (or 38%) did not result in a journal publication with the same title

36 (or 38%) resulted in an A* journal paper (JACM, SICOMP, Algorithmica, DCG, JCTA, MOR)

18 (or 19%) resulted in an A journal paper

4 (or 5%) resulted in a journal paper in a different, unclassified area

There are many highly-cited books on computational geometry and related areas such as combinatorial and discrete geometry, and computational topology — all of which are areas for which SoCG is the main outlet of current research.

Some books on Computational Geometry and their citations according to google scholar:

Computational Geometry (Preparata, Shamos): 12, 543 citations.

Computational Geometry (de Berg, van Kreveld, Overmars, Cheong): 12, 240 citations.

Computational Geometry in C (O'Rourke): 4, 156 citations.

Algorithms in combinatorial geometry (Edelsbrunner): 3, 500 citations.

Computational Geometry for Design and Manufacture (Faux, Pratt): 2, 231 citations.

Handbook of discrete and computational geometry (Toth, O'Rourke, Goodman): 2, 705 citations.

Art gallery theorems and algorithms (O'Rourke): 2, 366 citations.

LEDA: A platform for combinatorial and geometric computing (Mehlhorn, Näher), 1, 976 citations.

Lectures on discrete geometry (Matousek): 1, 885 citations

Research problems in discrete geometry (Brass, Moser, Pach): 1136 citations

Davenport-Schinzel sequences and their geometric applications (Sharir, Agarwal): 1, 107 citations.

Combinatorial geometry (Pach, Agarwal) 1, 042 citations.

Geometric folding algorithms: linkages, origami, polyhedra (Demaine, O'Rourke): 967 citations.

Computational geometry: an introduction through randomized algorithms (Mulmuley): 846 citations.

The Discrepancy Method: Randomness and Complexity (Chazelle) 689 citations.

Handbook of computational geometry (Sack, Urrutia): 548 citations.

Voronoi diagrams and Delaunay triangulations (Aurenhammer, Klein, Lee): 496 citations.

Geometric Approximation Algorithms (Har-Peled): 473 citations.

For comparison, books on general topics in advanced algorithms receive similar or lower number of citations:

Randomized Algorithms (Motwani, Raghavan): 7, 122 citations.

Approximation Algorithms (Vazirani): 5, 818 citations

Graph drawing: algorithms for the visualization of graphs (Battista, Eades, Tamassia, Tollis): 3, 439 citations. Online Algorithms (Fiat/Woeginer): 509 citations

Online Algorithms (Albers): 360 citations

Attachments

N/A

Proposers

First name: Anne Last name: Driemel Affiliation: University of Bonn Email: driemel@cs.uni-bonn.de

Submitted By

Name: Driemel Anne Email: adriemel@uni-bonn.de