

# Submission data for 2023 CORE conference ranking process IEEE International Workshop on Source Code Analysis and Manipulation

Árpád Beszédes, Coen De Roover, Quentin Stiévenart

# **Introductory Questions**

#### Conference

Title: IEEE International Workshop on Source Code Analysis and Manipulation

Acronym: SCAM

Rank: C

# **Requested Rank**

Rank: A

#### **Conference Details**

Month: October

Publisher: IEEE Computer Society

Bi-annual: False Multiconference: False

Component in a multi-conference or umbrella event: False

Colocated with other events: True

Colocated event description: ICSME - IEEE International Conference on Software Maintenance and Evolution

Event relationship description: ICSME selects the conference venue, and SCAM has always been co-located. ICSME and SCAM share

the budget planning with the sponsor. SCAM has a separate proceedings, paper selection process, and organization.

Alternative content: True

Alternative content description: Papers from all tracks are included, ie. Research (12 pages), Engineering (6 pages), Replication and Negative Results (12 pages), New Ideas and Emerging Results (5 pages).

# **Proceedings Publishing Style**

Proceedings Publishing: self-contained

Link to most recent proceedings: https://www.computer.org/csdl/proceedings/scam/2022/1JSpiLXrRG8

Further details:

#### **Most Recent Years**

#### **Most Recent Year**

Year: 2022

URL: http://www.ieee-scam.org/2022/

Location: Limassol, Cyprus Papers submitted: 44 Papers published: 17 Acceptance rate: 39

Source for numbers: https://doi.ieeecomputersociety.org/10.1109/SCAM55253.2022.00005

#### **General Chairs**

Name: Mariano Ceccato

Affiliation: University of Verona, Italy

Gender: M H Index: 28

 $GS cholar \ url: \ \texttt{https://scholar.google.com/citations?user=SCSD-ZYAAAAJ\&hl=en}$ 

DBLP url: https://dblp.org/pid/52/3888.html

# **Program Chairs**

Name: Mohammad Ghafari

Affiliation: Technical University of Clausthal, Germany

Gender: M H Index: 17

GScholar url: https://scholar.google.com/citations?user=6G3BI-UAAAAJ&hl=en

DBLP url: https://dblp.org/pid/119/3648.html

Name: Banani Roy

Affiliation: University of Saskatchewan, Canada

Gender: F H Index: 13

GScholar url: https://scholar.google.ca/citations?user=30kymdoAAAAJ&hl=en

DBLP url: https://dblp.org/pid/99/2750.html

#### Second Most Recent Year

Year: 2021

URL: http://www.ieee-scam.org/2021/

Location: Virtual Papers submitted: 43 Papers published: 14 Acceptance rate: 33

Source for numbers: https://doi.ieeecomputersociety.org/10.1109/SCAM52516.2021.00005

#### **General Chairs**

Name: Alexander Serebrenik

Affiliation: Eindhoven University of Technology, The Netherlands

Gender: M H Index: 54

GScholar url: https://scholar.google.com/citations?user=Mcn2e18AAAAJ&hl=en

DBLP url: https://dblp.org/pid/s/AlexanderSerebrenik.html

# **Program Chairs**

Name: Venera Arnaoudova

Affiliation: Washington State University, USA

Gender: F H Index: 19

GScholar url: https://scholar.google.ca/citations?user=PnqiKhgAAAAJ&hl=en

DBLP url: https://dblp.org/pid/45/5572.html

Name: Ben Hermann

Affiliation: Technical University Dortmund, Germany

Gender: M H Index: 11

GScholar url: https://scholar.google.de/citations?user=r5ZMp3MAAAAJ&hl=de

DBLP url: https://dblp.org/pid/147/7971.html

# **Third Most Recent Year**

Year: 2020

URL: http://www.ieee-scam.org/2020/

Location: Virtual Papers submitted: 58 Papers published: 16 Acceptance rate: 28

113901060921832479084&rtpof=true&sd=true

#### **General Chairs**

Name: Foutse Khomh

Affiliation: École Polytechnique Montréal, Canada

Gender: M H Index: 42

GScholar url: https://scholar.google.com/citations?user=YYXb3KIAAAAJ&hl=en

DBLP url: https://dblp.org/pid/32/147.html

# **Program Chairs**

Name: Cristina Cifuentes Affiliation: Oracle Labs, Australia

Gender: F H Index: 33

GScholar url: https://scholar.google.com/citations?user=iseZ69MAAAAJ&hl=en

DBLP url: https://dblp.org/pid/94/309.html

Name: Nikolaos Tsantalis

Affiliation: Concordia University, Canada

Gender: M H Index: 31

GScholar url: https://scholar.google.com/citations?user=Jxc9CBwAAAAJ&hl=en

DBLP url: https://dblp.org/pid/87/4206.html

#### **Policies**

Chair Selection: The Steering Committee selects the appointment of the General Chair and two Program Chairs of the Research Track. Other members of the organizing committee may be appointed by the General Chair at their discretion. The Steering Committee Charter linked below outlines the rules for selecting the Steering Committee members.

Policy name: Steering Committee Charter

Policy url: http://www.ieee-scam.org/SCAM-charter-2012.pdf

# **Program Committee**

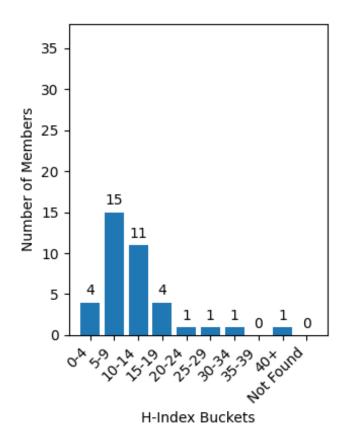
Link to pc: http://www.ieee-scam.org/2022/#pc

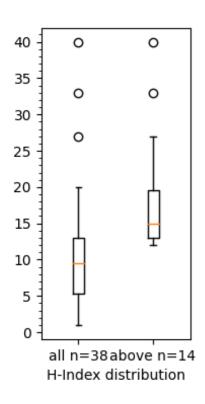
File: http://portal.core.edu.au/core/media/2023/pc\_members/SCAM-PC-2022f.txt

H-index plot: http://portal.core.edu.au/core/media/2023/pc\_graphs/higherrank\_hindex\_buckets\_2201.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.





http://portal.core.edu.au/core/media/2023/conf\_submissions\_clean\_spc/higherrank2201\_spc\_report.csv WPP Report: http://portal.core.edu.au/core/media/2023/wpp\_reports/8LIypDx3.txt

8. IEEE Working Conference on Source Code Analysis and Manipulation (SCAM)

Core Rank: C

This venue was published at 10 times by 5 of 12 individuals in the last 5+ years.

The individuals that publish at this venue are: Kevin A. Schneider(5), Christian Donald Newman(2), Foutse Khomh(2), Dario Di Nucci(1), Manishankar Mondal(1)

In 2018, there were 4 publications by 3 individuals: Christian Donald Newman, Kevin A. Schneider, Manishankar Mondal

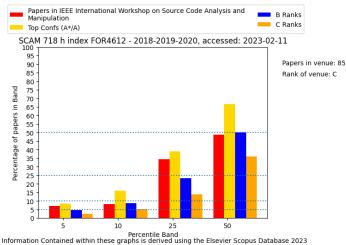
In 2019, there were 3 publications by 2 individuals: Christian Donald Newman, Kevin A. Schneider

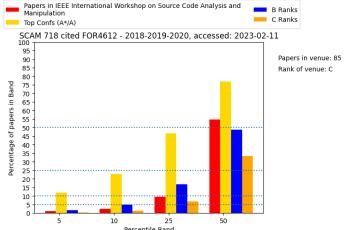
In 2021, there were 1 publications by 1 individuals: Foutse Khomh

In 2022, there were 2 publications by 2 individuals: Dario Di Nucci, Foutse Khomh

5 out of the 12 individuals published at this venue in 1 or more years 3 out of the 12 individuals published at this venue in 2 or more years

# Centile graphs of paper metrics





# Percentile Band Information Contained within these graphs is derived using the Elsevier Scopus Database 2023

#### **Top People Involvement**

name: Coen De Roover

h-index: 19

Google Scholar URL: https://scholar.google.com/citations?user=PdcRlcgAAAAJ&hl=en&oi=ao

Justification: Awards: Distinguished reviewer awards at ICSME, SCAM Best paper awards at SCAM'15 Best artifact award at ICSE'22, SCAM'22, Service: ICSME (PC), ICPC (PC), SANER (PC), MSR (PC), GPCE (Program Co-chair), Programming (PC), SCAM steering committee Other heads a large (~15 people) research group on SE (at Software Languages Lab, VUB)

Source: https://soft.vub.ac.be/~cderoove/

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
2	1	6	0	1

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

name: Kevin A. Schneider

h-index: 39

Google Scholar URL: https://scholar.google.com/citations?user=jSJG4wsAAAAJ&hl=en&oi=ao

Justification: Awards: Best paper award at SAC Service: Served in PC of number of conference and journals, ICPC (proceedings co-chair), elected member of the International Federation for Information Processing working group 2.7/13.4 on user interface engineering and past Prairie representative for the Canadian Association of Computer Science

Source: https://clones.usask.ca/kas/

Paper counts:

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

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

name: Eric Bodden

h-index: 44

Google Scholar URL: https://scholar.google.com/citations?user=Kr7kPfAAAAJ&hl=en&oi=ao

Justification: Awards: best paper at SCAM, ASE distinguished paper award, ACM SIGSOFT distinguished paper award (2012 and 2017), and others Grants: Emmy Noehter competive research grant and more third-party grants Service: Associate editor at TOSEM, TSE, Editorial board member at EMSE, steering committee at ESEC/FSE, ISSTA and more, organizer: ESEC/FSE (general co-chair), WODA (workshop, co-organizer) and more, PC membership: ICSE, POPL, ICSE, ESEC/FSE, ASE, and more Other: notable tools: SOOT, patents claimed in 2010 and 2014, many responsible disclosures of security vulnerabilities

Source: https://www.bodden.de/

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
1	4	0	0	0

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

name: Dave W. Binkley

h-index: 53

Google Scholar URL: https://scholar.google.com/citations?user=wY56fjQAAAAJ&hl=en&oi=ao

Justification: Seminal work on program slicing and on information retrieval techniques for source code, best artifact award ICSE'22, and

Source: http://www.cs.loyola.edu/~binkley/

Paper counts:

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

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

name: Gabriele Bavota

h-index: 65

 ${\bf Google\ Scholar\ URL: https://scholar.google.com/citations?user=inc2FLEAAAAJ\&hl=en\&oi=ao}$ 

Justification: Awards: distinguished papers at ICSE, ICSME, ASE, ICPC'20, MSR'19, ESEC/FSE'15, distinguished reviewer award at ICSE, TOSEM, MSR, JSS, SANER and more Service: co-chair journal first track ICSE'24, program co-chair ICSME, general chair ICPC, program co-chair SANER, PC member of ICSE, MSR, ASE, ICPC, ICSME and more, editorial board at EMSE, JSS and JSEP

Source: https://www.inf.usi.ch/faculty/bavota/

Paper counts:

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

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

name: Rainer Koschke

h-index: 44

Google Scholar URL: https://scholar.google.com/citations?user=F02JdKUAAAAJ&hl=en&oi=ao

Justification: Awards: distringuished reviewer at ICPC, SANER, distinguished paper award at ICSE, most influental paper award at ICSM

Service: steering committee member of a number of conferences, editorial member of several journals.

Source: https://user.informatik.uni-bremen.de/koschke/

Paper counts:

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

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

name: Árpád Beszédes

h-index: 25

Google Scholar URL: https://scholar.google.com/citations?user=hWOICKsAAAAJ&hl=en&oi=ao

Justification: Awards: Distinguished Reviewer Award at ESEC/FSE'22, ICSME'17, ICSME'16 Service: PC member of ICSE, ESEC/FSE, SCAM and more, journal editor for Journal of Software: evaluation and process, Emperical Software Engerineering (Springer), JSS (Elsevier), organizer: SCAM (steering comittee member, program co-chair), ESEC/FSE'11 (local organization co-chair) and more Source: http://www.inf.u-szeged.hu/~beszedes/eng/index.html

Paper counts:

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

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

name: Chanchal Kumar Roy

h-index: 47

Google Scholar URL: https://scholar.google.com/citations?user=vHHWD04AAAAJ&hl=en&oi=ao

Justification: Awards: most influental paper award at SANER'18 and ICPC'18, awarded the Outstanding Young Computer Science Researcher Award by CS-Can/Info-Can in 2018, and the New Researcher Award of University of Saskatchewan in 2019, TCSE distinguished paper award in 2018, most influental paper award at SANER 2018 Service: reviewer for journals such as Journal of

Software Evolution and Process, IEEE Transactions on Software Engineering, JSS and more, member of PC for ICSE (also program co-chair), SANER, MSR, organizator of ICPC (program co-chair, and general chair), and more

Source: https://clones.usask.ca/

Paper counts:

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

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

name: Alexander Serebrenik

h-index: 54

Google Scholar URL: https://scholar.google.com/citations?user=Mcn2e18AAAAJ&hl=en&oi=ao

Justification: Awards: distinguished reivewer award at MSR'22, ICSE'22, ESEC/FSE'20, ICPC'18, SANER'18, distinguished paper award at ICSE'23, ICSE'17, ICSE'19, ICSME'20, and others. Service: organizer of ICPC (steering committee, general chair), ICSME (steering comittee), PC member for ICSE, ASE, ICPC Other: book author of ""Evolving Softwarer Systems" co-authored with Tom Mens and Anthony Cleve

Source: https://www.win.tue.nl/~aserebre/

Paper counts:

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

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

name: Massimiliano Di Penta

h-index: 88

Google Scholar URL: https://scholar.google.com/citations?user=j6ucyOAAAAAJ&hl=en&oi=ao

Justification: Awards: Second-most productive senior researcher worldwide in software engineering, most influental paper awards at SANER'19, ACM SIGEVO Impact Paper Award, ACM SIGSOFT distinguished paper awards at ESEC/FSE'19, ESEC/FSE'15, ICSE'15, best paper award at MSR'07 and ICPC'11, and more Service: editor-in-chief for Journal of Software Evolution and Processes, editorial member for many more. Steering committee member for ICSE, ESEC/FSE and ASE (currently) and more in the past. PC member of ICSE, ESEC/FSE, SANER, ASE, and more, organizer of MSR (general chair), ICSE, ESEC/FSE (program (co-) chair), steering comitee member of ICSME, MSR, ICPC and more

Source: https://mdipenta.github.io/

Paper counts:

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

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

# Area Leaders publishing

Method of selection: We launched google queries of the suggested form (e.g.,

https://scholar.google.com/citations?hl=en&view\_op=search\_authors&mauthors=label%3Aprogram\_analysis&btnG= for program analysis) for the following popular topics mentioned in the conference's call for papers: Program Analysis, {Code Clone, Clone Detection, Software Clones}, Program Comprehension, Slicing, {Software Maintenance and Evolution, Software Evolution}, Software Security, Software Analytics, {Reengineering, Reverse Engineering}, Program Transformation. We included the top-4 area leaders, except when they were already included in the top-10 list of the previous section, in the results for an earlier query or unless they did not have an h-index above 45.

Keyword: Program Analysis, {Code Clone, Clone Detection, Software Clones}, Program Comprehension, Slicing, {Software Maintenance and Evolution, Software Evolution}, Software Security, Software Analytics, {Reengineering, Reverse Engineering}, Program

	name	h-index	gscholar url
	Mark Harman	100	https://scholar.google.com/citations?hl=en&user=IwSN8IgAAAAJ
	Thomas Reps	82	https://scholar.google.com/citations?hl=en&user=pwhyTqOAAAAJ
	Thomas Ball	66	https://scholar.google.com/citations?hl=en&user=d2f0VUQAAAAJ
	Andreas Zeller	66	https://scholar.google.com/citations?hl=en&user=-Qytr_YAAAAJ
	Katsuro Inoue	46	https://scholar.google.com/citations?hl=en&user=S1iG5sAAAAAJ
	Denys Poshyvanyk	81	https://scholar.google.com/citations?hl=en&user=gyLFs0IAAAAJ
	Sven Apel	70	https://scholar.google.com/citations?hl=en&user=_4ssMloAAAAJ
	Dror Feitelson	59	https://scholar.google.com/citations?hl=en&user=DQdE9-MAAAAJ
	Andrian Marcus	58	https://scholar.google.com/citations?hl=en&user=ZZiaPdYAAAAJ
	Andrea De Lucia	76	https://scholar.google.com/citations?hl=en&user=iyxOu6kAAAAJ
Transformation	Giuliano Antoniol	70	https://scholar.google.com/citations?hl=en&user=136elhQAAAAJ
	Harald Gall	62	https://scholar.google.com/citations?hl=en&user=kXX_FYoAAAAJ
	Laurie Williams	76	https://scholar.google.com/citations?hl=en&user=Cln2viUAAAAJ
	Yves Le Traon	71	https://scholar.google.com/citations?hl=en&user=DmGlmNEAAAAJ
	Mohammad Ramezani	75	https://scholar.google.com/citations?hl=en&user=KDhPgfIAAAAJ
	David Lo	88	https://scholar.google.com/citations?hl=en&user=Ra4bt-oAAAAJ
	Ahmed E. Hassan	94	https://scholar.google.com/citations?hl=en&user=9hwXx34AAAAJ
	Tim Menzies	69	https://scholar.google.com/citations?hl=en&user=7htTUTgmLtUC
	Tao Xie	76	https://scholar.google.com/citations?hl=en&user=DhhH9J4AAAAJ
	Nadim Asif	74	https://scholar.google.com/citations?hl=en&user=78wQeEsAAAAJ
	Kenny Wong	66	https://scholar.google.com/citations?hl=en&user=IYju4AAAAJ
	Oscar Nierstrasz	54	https://scholar.google.com/citations?hl=en&user=Yi00hUYAAAAJ

WPP Report: http://portal.core.edu.au/core/media/2023/wpp\_reports/dDvgEiLX.txt

9. IEEE Working Conference on Source Code Analysis and Manipulation (SCAM)
Core Rank: C

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This venue was published at 8 times by 6 of 17 individuals in the last 5+ years.

The individuals that publish at this venue are: Oscar Nierstrasz(3), Andrea De Lucia(1), Andrian Marcus(1), Giuliano Antoniol(1), Mark Harman(1), Yves Le Traon(1)

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In 2018, there were 2 publications by 2 individuals: Mark Harman, Yves Le Traon
In 2019, there were 1 publications by 1 individuals: Andrian Marcus
In 2020, there were 1 publications by 1 individuals: Oscar Nierstrasz
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In 2021, there were 3 publications by 2 individuals: Giuliano Antoniol, Oscar Nierstrasz

In 2022, there were 1 publications by 1 individuals: Andrea De Lucia

6 out of the 17 individuals published at this venue in 1 or more years 1 out of the 17 individuals published at this venue in 2 or more years  $\frac{1}{2}$ 

# **Additional Data**

# **Google Scholar Data**

Sub-category url: https://scholar.google.com/citations?view\_op=top\_venues&hl=en&vq=eng\_softwaresystems

Position in sub-category: 20+ h5 index of 20th item in category: 30 h5 index for this conference: 13

#### Relationship to similar conferences

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

IEEE International Conference on Software Maintenance and Evolution (ICSME) - Co-located conference, the scope is broader with more papers and participants, but the quality and esteem is similar. Similar visibility due to often joint marketing.

IEEE Working Conference on Software Visualization (VISSOFT) - Co-located conference, smaller in size.

IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER) - Broader scope, but the quality and esteem is similar, larger, but high overlap in the communities.

IEEE/ACM International Conference on Automated Software Engineering (ASE) - Broader scope, bigger conference. Quality and esteem is stronger.

IEEE International Conference on Software Quality, Reliability and Security (QRS) - Somewhat related topic but broader. Visibility is lower, and little overlap between the communities. Associated research communities regard SCAM stronger.

ACM SIGPLAN International Conference on Generative Programming: Concepts&Experiences (GPCE) - Smaller community but quality is similar.

ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation (PEPM) - More specific topics and smaller. International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI) - More specific topics and smaller. IEEE/ACM International Conference on Program Comprehension (ICPC) - Related topic, often overlapping communities. Similar size and quality.

International Conference on Software Technologies (ICSOFT) - Broader scope and larger, but associated research communities regard SCAM significantly stronger.

#### Other Information

#### Other Relvant Info

Other relevant information: Please change the name of the conference to the International Working Conference on Source Code Analysis and Manipulation (SCAM). It started as a workshop in 2001, but soon, in 2007 its format and hence its name were changed to "conference"

The conference is traditionally co-located with the International Conference on Software Maintenance and Evolution, which is the premier international forum for researchers and practitioners working in the field of software maintenance and evolution. The SCAM conference has its separate Steering Committee, Organization Committees, paper selection and publication process.

The SCAM conference is a unique venue to discuss techniques and applications which concern analysis and/or manipulation of the source code of computer systems. While much attention in the wider software engineering community is properly directed towards other aspects of systems development and evolution, such as specification, design and requirements engineering, it is the source code that contains the only precise description of the behaviour of the system. The analysis and manipulation of source code thus remains a pressing concern. While there are other conferences dealing with more broader concepts in software engineering, and similar areas like programming languages, SCAM is the only one to discuss generic concepts related to the source code with various applications. One particular property of the conference is its highly interactive nature. Traditionally, the conference schedules interactive, directed discussions after the presentation of papers in a slot. Feedback from the participants supports the usefulness of this format. Keynote speakers are typically invited from both academia and industry, and include highly esteemed researchers and practitioners from various fields related to source code analysis and manipulation. Some of the keynotes were the following: Eric Bodden (Paderborn University), Paul Anderson (GrammaTech Inc.), Peter O'Hearn (University College London), Mark Harman (Meta Inc.), Michele Lanza (USI, Lugano), Tom Zimmerman (Microsoft Research), Oscar Nierstrasz (University of Bern), Tao Xie (Microsoft Research), Paul Black (National Institute of Standards and Technology, USA), Andreas Zeller (Saarland University), Michael Ernst (University of Washington), Oege de Moor (Oxford University, UK), Eelco Visser (TU Delft).

Apart from the main, Research track, the conference also includes Replication and Negative Results Papers, Engineering and New Ideas and Emerging Results tracks, as well as Most Influential Paper presentations, and Artifact Evaluations. Selected papers from each edition of the conference are invited to be extended and submitted to a special issue of a highly esteemed software engineering journal, e.g., Journal of Software: Evolution and Process, Journal of Systems and Software, Journal of Empirical Software Engineering, IET Software, among others.

The conference is governed by its Steering Committee, about which information can be found at: http://www.ieee-scam.org/

#### **Attachments**

N/A

# **Proposers**

First name: Árpád Last name: Beszédes

Affiliation: University of Szeged, Hungary Email: beszedes@inf.u-szeged.hu

First name: Coen Last name: De Roover

Affiliation: Vrije Universiteit Brussel, Belgium

Email: Coen.De.Roover@vub.be

First name: Quentin Last name: Stiévenart

Affiliation: Université du Québec à Montréal, Canada

Email: stievenart.quentin@ugam.ca

# **Submitted By**

Name: Beszédes Árpád

Email: beszedes@inf.u-szeged.hu