

Submission data for 2023 CORE conference ranking process IEEE/IFIP International Conference on Dependable Systems and Networks

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Introductory Questions

Conference

Title: IEEE/IFIP International Conference on Dependable Systems and Networks Acronym : DSN Rank: A

Requested Rank

Rank: A*

Conference Details

Month: June Publisher: IEEE Computer Society Bi-annual: False Multiconference: False Component in a multi-conference or umbrella event: False Colocated with other events: False Alternative content: False

Proceedings Publishing Style

Proceedings Publishing: self-contained Link to most recent proceedings: https://ieeexplore.ieee.org/xpl/conhome/9833551/proceeding Further details:

Most Recent Years

Most Recent Year

Year: 2022 URL: https://dsn2022.github.io Location: Baltimore, Maryland, USA Papers submitted: 262 Papers published: 49 Acceptance rate: 19 Source for numbers: https://www.dependability.org/?page_id=327

General Chairs

Program Chairs

Name: Sonia Ben Mokhtar Affiliation: LIRIS/CNRS Gender: F H Index: 30 GScholar url: https://scholar.google.com/citations?hl=it&user=QBpJIDgAAAAJ DBLP url: https://dblp.org/pid/b/SoniaBenMokhtar.html Name: Peng Liu Affiliation: Pennsylvania State University Gender: M H Index: 57 GScholar url: https://scholar.google.com/citations?user=qVOHi9cAAAAJ&hl=it&oi=ao DBLP url: https://dblp.org/pid/21/6121-5.html

Second Most Recent Year

Year: 2021 URL: https://dsn2021.ntu.edu.tw/index.html Location: Taipei, Taiwan (Virtual) Papers submitted: 295 Papers published: 48 Acceptance rate: 16 Source for numbers: https://www.dependability.org/?page_id=327

General Chairs

Name: Sy-Yen Kuo Affiliation: National Taiwan University Gender: M H Index: 50 GScholar url: https://scholar.google.com/citations?user=NuPxDGQAAAAJ&hl=it&oi=ao DBLP url: https://dblp.org/pid/57/264.html Name: Yennun Huang Affiliation: Academia Sinica Gender: M H Index: 39 GScholar url: https://scholar.google.com/citations?user=nsyveTAAAAAJ&hl=it&oi=ao DBLP url: https://dblp.org/pid/84/3147.html

Program Chairs

Name: Alysson Bessani Affiliation: University of Lisbon Gender: M H Index: 33 GScholar url: https://scholar.google.com/citations?user=-mFXT_oAAAAJ&hl=it&oi=ao DBLP url: https://dblp.org/pid/68/1448.html Name: Giuliano Casale Affiliation: Imperial College London Gender: M H Index: 39 GScholar url: https://scholar.google.com/citations?user=Os1VLoQAAAAJ&hl=it&oi=ao DBLP url: https://dblp.org/pid/16/2365.html

Third Most Recent Year

Year: 2020 URL: http://2020.dsn.org/ Location: Valencia, Spain (Virtual) Papers submitted: 291 Papers published: 48 Acceptance rate: 16 Source for numbers: https://www.dependability.org/?page_id=327

General Chairs

Name: Pedro Gil-Vicente Affiliation: Universitat Politecnica de Valencia, Spain Gender: M H Index: 25 GScholar url: https://scholar.google.com/citations?user=Zdaz6SAAAAAJ&hl=it&oi=sra DBLP url: Name: Juan Carlos Ruiz-Garcia Affiliation: Universitat Politecnica de Valencia, Spain Gender: M H Index: 17 GScholar url: https://scholar.google.com/citations?hl=en&user=IwVJRWUAAAAJ DBLP url:

Program Chairs

Name: Kaustubh Joshi
Affiliation: AT&T Labs - Research
Gender: M
H Index: 27
GScholar url: https://scholar.google.com/citations?user=qV8kf28AAAAJ&hl=it&oi=ao
DBLP url: https://dblp.org/pid/33/2232.html
Name: Haining Wang
Affiliation: Virginia Tech
Gender: M
H Index: 54
GScholar url: https://scholar.google.com/citations?user=tmOInzMAAAAJ&hl=it&oi=ao
DBLP url: https://dblp.org/pid/81/4036.html

Policies

Chair Selection: The selection of the General Chairs of a DSN edition is discussed and voted on during the business meeting of the Technical Committee on Fault Tolerance and Dependable Computing that takes place at the last session of the ongoing DSN edition. All DSN participants are invited to attend this meeting. All proposals for hosting future conference editions are presented by the General chairs offering to organize the conference. A vote takes place during the business meeting to decide on the location and General Chairs for the edition to be scheduled two years ahead (Y+2).

The Program Chairs are selected by DSN Steering Committee two years before the corresponding edition. Several criteria are considered, starting at the top with the recognized expertise and visibility of the potential candidates, as reflected by publication track, citations record, previous responsibilities on the organization of conferences, and active participation in DSN; other criteria include complementarity between the PC co-chairs on the topics covered by the conference, the association of a senior and more junior member, gender diversity, etc.

Policy name: Equity, Diversity, Inclusion and Code of conduct

Policy url: https://dsn2023.dei.uc.pt/about_diversity.html

Policy name: Ethical Considerations, Conflicts of Interests and Submission Policy for PC and Organizing Committee Members Policy url: https://dsn2023.dei.uc.pt/calls_cfp-research.html

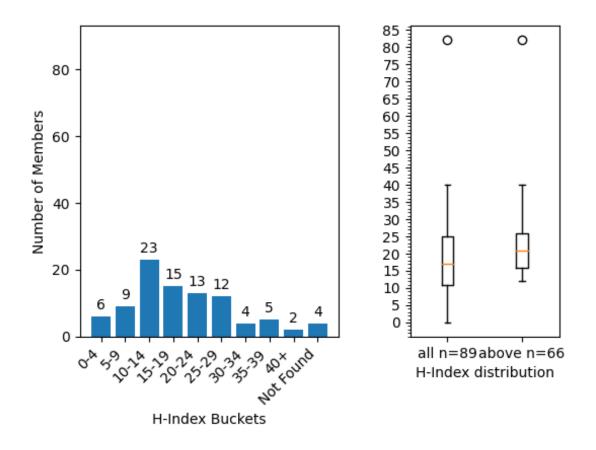
Policy name: Open Science Policy

Policy url: https://dsn2023.dei.uc.pt/calls_cfp-research.html

Program Committee

Link to pc: https://dsn2022.github.io/progcomm.html File: http://portal.core.edu.au/core/media/2023/pc_members/DSN_formatted_v5_IDmBSVc.txt H-index plot: http://portal.core.edu.au/core/media/2023/pc_graphs/higherrank_hindex_buckets_2076.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/higherrank2076_spc_report.csv WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/OBmEJph9.txt

1. Dependable Systems and Networks (DSN) Core Rank: A

This venue was published at 97 times by 38 of 53 individuals in the last 5+ years.

The individuals that publish at this venue are: Karthik Pattabiraman(11), Alysson Neves Bessani(8), Christof Fetzer(6), Paolo Rech(6), Valerio Schiavoni(6), Dan Dongseong Kim(5), Haining Wang(5), Saurabh Bagchi(5), Devesh Tiwari(4), Evgenia Smirni(4), Fernando Pedone(4), Dimitris Gizopoulos(3), Domenico Cotroneo(3), Ilir Gashi(3), Marcello Cinque(3), Mohamed Kaaniche(3), Onur Mutlu(3), Yvonne-Anne Pignolet(3), Alain Tchana(2), Andrea Bondavalli(2), Fumio Machida(2), Henrique Madeira(2), Sara Bouchenak(2), Xuhua Ding(2), Chia-Mu Yu(1), Emmanuelle Anceaume(1), Felicita Di Giandomenico(1), Francois Taiani(1), Katinka Wolter(1), Laurent Reveillere(1), Marc Dacier(1), Marco Paulo Amorim Vieira(1), Michael Paulitsch(1), Robert Birke(1), Sonia Ben Mokhtar(1), Xiapu Luo(1), Yinzhi Cao(1), Zhiqiang Lin(1)

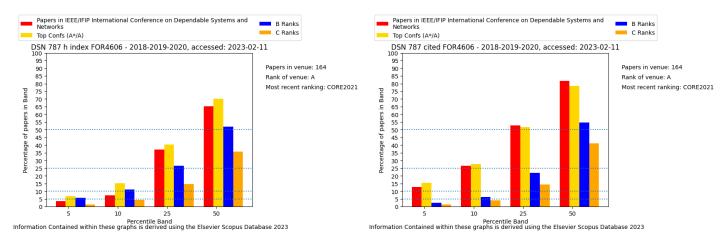
In 2018, there were 30 publications by 24 individuals: Alysson Neves Bessani, Andrea Bondavalli, Chia-Mu Yu, Christof Fetzer, Dan Dongseong Kim, Devesh Tiwari, Dimitris Gizopoulos, Domenico Cotroneo, Emmanuelle Anceaume, Evgenia Smirni, Fernando Pedone, Francois Taiani, Haining Wang, Ilir Gashi, Karthik Pattabiraman, Laurent Reveillere, Marcello Cinque, Mohamed Kaaniche, Paolo Rech, Sara Bouchenak, Saurabh Bagchi, Valerio Schiavoni, Xiapu Luo, Xuhua Ding

In 2019, there were 13 publications by 17 individuals: Alysson Neves Bessani, Christof Fetzer, Dan Dongseong Kim, Dimitris Gizopoulos, Domenico Cotroneo, Fumio Machida, Henrique Madeira, Karthik Pattabiraman, Marcello Cinque, Onur Mutlu, Paolo Rech, Robert Birke, Sara Bouchenak, Saurabh Bagchi, Sonia Ben Mokhtar, Yvonne-Anne Pignolet, Zhiqiang Lin

In 2020, there were 22 publications by 20 individuals: Alain Tchana, Alysson Neves Bessani, Andrea Bondavalli, Christof Fetzer, Dan Dongseong Kim, Dimitris Gizopoulos, Domenico Cotroneo, Evgenia Smirni, Fernando Pedone, Henrique Madeira, Ilir Gashi, Karthik Pattabiraman, Katinka Wolter, Michael Paulitsch, Onur Mutlu, Paolo Rech, Saurabh Bagchi, Valerio Schiavoni, Yinzhi Cao, Yvonne-Anne Pignolet
In 2021, there were 16 publications by 12 individuals: Alain Tchana, Christof Fetzer, Devesh Tiwari, Evgenia Smirni, Fumio Machida, Haining Wang, Ilir Gashi, Karthik Pattabiraman, Mohamed Kaaniche, Paolo Rech, Valerio Schiavoni, Xuhua Ding
In 2022, there were 16 publications by 13 individuals: Christof Fetzer, Dan Dongseong Kim, Evgenia Smirni, Felicita Di Giandomenico, Haining Wang, Karthik Pattabiraman, Marc Dacier, Marcello Cinque, Marco Paulo Amorim Vieira, Onur Mutlu, Paolo Rech, Saurabh Bagchi, Yvonne-Anne Pignolet

38 out of the 53 individuals published at this venue in 1 or more years 24 out of the 53 individuals published at this venue in 2 or more years 15 out of the 53 individuals published at this venue in 3 or more years 6 out of the 53 individuals published at this venue in 4 or more years 3 out of the 53 individuals published at this venue in 5 or more years

Centile graphs of paper metrics



Top People Involvement

name: Ravishankar K. Iyer

h-index: 61

Google Scholar URL: https://dblp.org/pid/i/RavishankarKIyer.html

Justification: Top contributor to DSN (52 papers) Fellow of the IEEE, ACM, AAAS (American Academy for the Advancement of Science) (2005) Awards: IEEE Emanuel R. Piore Award, ACM Outstanding Contributions award (2011); Founding Editor-in-Chief of IEEE Transactions on Dependable and Secure Computing Research Research area: Dependability measurements, experimental assessment and fault-tolerant architectures (https://ece.illinois.edu/about/directory/faculty/rkiyer) Paper counts:

Fifth most recent:

2

aper counts:			
Most Recent:	Second most recent:	Third most recent:	Fourth most recent:
- 1			

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

name: Michael Lyu

h-index: 108

Google Scholar URL: https://scholar.google.ca/citations?hl=en&user=uQnBgKOAAAAJ

Justification: Top contributor to DSN in last 5 years IEEE Fellow (2004). AAAS Fellow (2007). Croucher Senior Research Fellow (2008). IEEE Reliability Society Engineer of the Year (2010). ACM Fellow (2015). China Computer Federation (CCF) Overseas Outstanding Contributions Award (2018). Choh-Ming Li Professor of Computer Science and Engineering (2020). The 13th Guanghua Engineering Science and Technology Award (2020). HKAES Fellow (2021) Research area: Software reliability engineering, software fault tolerance, dependable distributed systems and networks (see https://www.cse.cuhk.edu.hk/lyu/home) Paper counts:

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

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

name: Haining Wang	
h-index: 55	

Google Scholar URL: https://scholar.google.ca/citations?hl=en&user=tmOInzMAAAAJ

Justification: A top contributor to DSN in last 5 years. IEEE Fellow (2020). Research area: Security, Networking Systems, Cloud Computing (see https://ece.vt.edu/people/profile/hnw.html)

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

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

name: Christof Fetzer

h-index: 55

Google Scholar URL: https://scholar.google.ca/citations?hl=en&user=H7v4UbgAAAAJ

Justification: 3rd Top contributor in the last 5 years, Top 7 since 1988 (20 papers) Awards: Carter award (1997), Best paper awards (SRDS, DSN, Cloud Computing, Usenix LISA). Research area: Dependable systems (see

https://tu-dresden.de/ing/informatik/sya/se/die-professur/inhaber-in)

Paper counts:

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

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

name: Pascal Felber

h-index: 53

Google Scholar URL: https://scholar.google.ca/citations?user=Rl7te6EAAAAJ&hl=en&oi=ao

Justification: Top contributor in the last 5 years Research area: Dependable, concurrent, and distributed systems (see http://members.unine.ch/pascal.felber/index.html)

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:
0	3	1	1	4

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

name: Zbigniew Kalbarczyk

h-index: 52

Google Scholar URL: https://scholar.google.ca/citations?user=OARk6ssAAAAJ&hl=en&oi=ao

Justification: Top contributor to the conference in the number of papers published (35 papers). Research area: Cloud computing, Computer architecture, Computer security, privacy, and information trust, Dynamic reconfiguration of systems for fault tolerance and mitigation, Fault tolerance and reliability (see https://ece.illinois.edu/about/directory/faculty/kalbarcz) Paper counts:

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

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

name: Evgenia Smirni

h-index: 43

Google Scholar URL: https://scholar.google.ca/citations?hl=en&user=1Ed4HYUAAAAJ

Justification: Top contributor in the last 5 years IEEE Fellow. ACM Distinguished Scientist. Research area: Performance, Reliability and Dependability, Applied Machine Learning, Analytical Modeling (see https://www.cs.wm.edu/~esmirni/) Paper counts:

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

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

name: Karthik Pattabiraman

h-index: 42

Google Scholar URL: https://scholar.google.ca/citations?hl=en&user=p_V9YWgAAAAJ

Justification: Top contributor in the last 5 years Distinguished member of the ACM. Distinguished contributor of the IEEE Computer Society. Awards: Rising Star in Dependability Award in 2020, UIUC CS department's early career alumni achievement award in 2018, UBC Killam mentoring excellence award in 2020, UBC Killam Faculty Research Prize in 2018, UBC Killam Faculty Research Fellowship in 2016, NSERC Discovery Accelerator Supplement (DAS) in 2015, and the William Carter Dissertation Award in 2008 Research area: Dependable Computer Systems, Computer Security, Cyber-Physical Systems, Software Engineering. (see

https://ece.ubc.ca/karthik-pattabiraman/)

Paper counts:

Most Recent:	Second most recent:	Third most recent:	Fourth most recent:	Fifth most recent:		
1	2	1	0	2		
Attendence: Almost always (> 200/ of the time)						

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

name: Alysson Bessani

h-index: 33

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

Justification: Top contributor in the last 5 years Awards: Best Paper Award on SRDS'21. Test-of-Time Award at IEEE/IFIP DSN'21. Best Student Paper Award at ACM/IFIP Middleware 2019. Research area: Distributed Systems, Dependability, Fault Tolerance, and Security (see http://www.di.fc.ul.pt/~bessani/)

Paper counts:

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

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

name: Timothy Tsai						
h-index: 28						
Google Scholar URL: https://scholar.google.ca/citations?hl=en&user=QCx7_H4AAAAJ						
Justification: Top contributor in the last 5 years Research area: Resilience and Safety, Computer Architecture, High-Performance						
Computing. (see https://research.nvidia.com/person/timothy-tsai)						
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)

Area Leaders publishing

Method of selection: We used the keywords reported below from google scholar. We then filtered in the people sho are still active and/or is chief editors of A* Journals.

name	h-index	gscholar url
Kishor S. Trivedi	111	https://scholar.google.com/citations?user=fEVXhhAAAAAJ
Michael R. Lyu	109	https://scholar.google.com/citations?user=uQnBgKOAAAAJ
Engin Kirda	73	https://scholar.google.com/citations?hl=it&user=AHh8JssAAAAJ
Onur Mutlu	119	https://scholar.google.com/citations?hl=it&user=7XyGUGkAAAAJ
Juan M. Corchado	117	https://scholar.google.com/citations?user=j7syrnkAAAAJ
Elisa Bertino	108	https://scholar.google.com/citations?user=EfuT9RoAAAAJ&hl=it&oi=ao
Xiang-Yang Li	88	https://scholar.google.com/citations?user=JURtNbOAAAAJ
Angelos D. Keromytis	84	https://scholar.google.com/citations?user=mncyWbcAAAAJ
Chunming Qiao	77	https://scholar.google.com/citations?user=uqLD3qYAAAAJ
Laurie A. Williams	76	https://scholar.google.com/citations?user=Cln2viUAAAAJ
Danny Dolev	71	https://scholar.google.com/citations?user=RAt7zSUAAAAJ
Kenneth P. Birman	69	https://scholar.google.com/citations?user=I-rKkyEAAAAJ
Robbert van Renesse	67	https://scholar.google.com/citations?user=uJbM58UAAAAJ
André Schiper	63	https://scholar.google.com/citations?user=ZufyqFoAAAAJ
Franck Cappello	60	https://scholar.google.com/citations?user=z5u02kIAAAAJ
Willy Susilo	79	https://scholar.google.com/citations?user=eNOmOvkAAAAJ
William H Sanders	55	https://scholar.google.com/citations?user=FClnlsgAAAAJ&hl=it&oi=ao
Hao Ming Chen	67	https://scholar.google.com/citations?user=eUYyyRMAAAAJ
Cong Wang	48	https://scholar.google.com/citations?user=wRa_10EAAAAJ&hl=it&oi=ao
Herbert Bos	63	https://scholar.google.com/citations?user=KHMut54AAAAJ&hl=it
Alan R. Dennis	78	https://scholar.google.com/citations?user=6iPELOEAAAAJ
Saurabh Bagchi	55	https://scholar.google.com/citations?hl=it&user=3EfsOvYAAAAJ
Mauro Pezzè	45	https://scholar.google.com/citations?user=zhbGyEYAAAAJ&hl=it&oi=ao
Michael Reiter	90	https://scholar.google.com/citations?user=GaRxukMAAAAJ&hl=it&oi=ao

Keyword: dependable computing, cybersecurity, resilient systems, fault tolerance, software security

WPP Report: http://portal.core.edu.au/core/media/2023/wpp_reports/vZFJ14cy.txt

1. Dependable Systems and Networks (DSN) Core Rank: A

This venue was published at 22 times by 9 of 21 individuals in the last 5+ years.

The individuals that publish at this venue are: Saurabh Bagchi(5), Michael R. Lyu(4), Onur Mutlu(3), William H. Sanders(3), Franck Cappello(2), Kenneth P. Birman(2), Elisa Bertino(1), Herbert Bos(1), Kishor S. Trivedi(1) In 2018, there were 4 publications by 4 individuals: Kenneth P. Birman, Michael R. Lyu, Saurabh Bagchi, William H. Sanders In 2019, there were 7 publications by 5 individuals: Franck Cappello, Michael R. Lyu, Onur Mutlu, Saurabh Bagchi, William H. Sanders In 2020, there were 4 publications by 3 individuals: Kenneth P. Birman, Onur Mutlu, Saurabh Bagchi In 2021, there were 3 publications by 3 individuals: Franck Cappello, Herbert Bos, Kishor S. Trivedi In 2022, there were 4 publications by 4 individuals: Elisa Bertino, Michael R. Lyu, Onur Mutlu, Saurabh Bagchi

9 out of the 21 individuals published at this venue in 1 or more years 6 out of the 21 individuals published at this venue in 2 or more years 3 out of the 21 individuals published at this venue in 3 or more years 1 out of the 21 individuals published at this venue in 4 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_computingsystems Position in sub-category: 20+ h5 index of 20th item in category: 42 h5 index for this conference: 34

Relationship to similar conferences

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

IEEE Real-Time Systems Symposium (RTSS) RTSS focuses on real-time systems design, unlike DSN, which focuses on dependable and secure systems. The two communities have some overlap, especially in the context of safety-critical, hard-real time systems (e.g., avionics), but there are only a few researchers who publish in both conferences.

USENIX Symposium on Operating Systems Design and Implementation (OSDI) OSDI is a broad systems venue that solicits papers on all aspects of software systems design, including reliability and security. DSN, on the other hand, focuses on dependable and secure computer systems, spanning both hardware and software.

ACM Symposium on Operating Systems Principles (SOSP) Similarly to OSDI, SOSP is a broad system venue that solicits papers on many aspects of systems practice, including secure and reliable systems. The two communities have some overlap, specifically in the context of distributed systems, but there are only a few researchers who publish in both conferences.

International Symposium on Computer Architecture (ISCA) ISCA is the leading forum for work on computer architecture and hardware systems. ISCA also attracts papers at the intersection of computer architecture and dependability/security. However, DSN focuses on the dependability and security of both software and hardware systems, as well as distributed systems. The overlap between the ISCA and DSN communities is small and consists of researchers who work in hardware dependability and security.

SIGMETRICS SIGMETRICs primarily focuses on the measurement and modeling of computer systems, with a focus on performance evaluation. In contrast, DSN focuses primarily on dependability and security. Though there are some papers at SIGMETRICS on reliability and security modeling and evaluation, DSN remains the premier venue for the same. DSN also has a much broader focus and accepts papers on dependable and secure systems design, not only on modeling and measurement. The communities have limited overlap.

ACM Conference on Computer and Communications Security (CCS) ACM CCS is one of the top security conferences covering all real-world aspects of computer security and privacy. For example, CCS covers malware and hardware security. DSN also covers those aspects with a focus also on the domains in which malware is deployed and also examines the interplay between security and fault-tolerance for hardware. DSN also covers topics that are focused exclusively on fault tolerance and fault injection or of the theory and practical aspects of distributed systems.

IEEE Security and Privacy IEEE Security and Privacy is a top security conference that covered the theory, design, implementation, analysis, verification, or empirical evaluation and measurement of secure systems. DSN also covers such topics with less emphasis, for example, on cryptography.

Other Information

Other Relvant Info

Other relevant information: We have uploaded a file.

Attachments

http://portal.core.edu.au/core/media/2023/request_attachment/DSN-Rational-Increase-Ranking_VIxplqa.pdf

Proposers

First name: Domenico Last name: Cotroneo Affiliation: Università degli Studi di Napoli Federico II Email: cotroneo@unina.it

First name: Nuno Last name: Neves Affiliation: Universidade de Lisboa Email: nuno@di.fc.ul.pt

Submitted By

Name: Neves Nuno Email: nuno@di.fc.ul.pt