

Annual Report of the Publications Board

For the Period July 1, 2020 – June 30, 2021

Submitted by: Joseph A. Konstan (co-Chair), Jack W. Davidson (co-Chair through June 30, 2021), and Divesh Srivastava (co-Chair starting July 1, 2021). October 15, 2021

I. Overview and Strategic Directions

To support ACM's mission of advancing computing as a science and a profession, the Publications Board focuses on developing, enhancing, and maintaining high-quality publications that disseminate new research, translate research to inform practice, and reflect on practice to inspire innovation in both practice and research. The Publications Board is composed of volunteers from the community working in partnership with and supported by ACM's publications staff, information systems staff, and staff in other areas. Together we oversee ACM's organization-wide publications strategy, policies, and procedures; the ACM Digital Library; and our broad collection of journals, proceedings, magazines, and books.

In Fiscal Year 2021 we focused the Publications Board's activity around the following key priorities:

- Preparations for the launch of a new ACM Digital Library Board, with responsibility for the DL Platform (broadly construed), and the associated restructuring (and volunteer realignments) needed to enable that Board to launch successfully July 1, 2021.
- Continued roll-out and progress with ACM Open, making progress towards ACM Council's target goal of success in five years.
- Diversity, Equity, and Inclusion work, including recruiting new volunteers broadly (the results of this work will mostly be seen in FY 2022).
- Development and implementation of policies and procedures to support name changes in published works, motivated by the challenges faced by individuals who change names in circumstances where use of their prior names can be harmful or hurtful.
- Conducted wide scale Joint Investigative Committee (JIC) Investigation into Significant Allegations of Professional and Publications Related Misconduct related to ISCA '19 conference
- Updated ACM Publications Policy and Practices to ensure that all ACM authors are able to comply with Plan S requirements when publishing their Work with ACM.
- Approval of a new ACM Publications Policy to mandate the use of Open Research and Contributor IDs (ORCID) for all ACM Journals (in 2021) and ACM Conferences (in 2022) to improve ACM's author name normalization process to improve ACM Digital Library publication data, provide more accurate data for ACM Open, Ethics & Plagiarism detection, and other services aimed at strengthening ACM's overall service to the Community.
- Operational excellence in evaluation of journal and magazine publications, working with editors to improve publications, and conducting open searches in conjunction with the relevant communities to fill editorial vacancies.
- Identification, evaluation, approval, and launch of new journal publications in key growth areas across Computer Science.
- Managing the increased level and severity of publication misconduct accusations.
- Working to understand various aspects of the "crisis" in reviewing, from challenges in recruiting, retaining, and training volunteers to issues of reviewer misconduct.

II. Basic Publications Board Information

A. Members of the Publications Board

A list of members of the Publications Board during FY21 is given in Table 1. Three new members joined the Board during FY21:

- James Larus (EPFL Switzerland)
- Marc Najork (Google Research)
- Bhavani Thuraisingham (UT Dallas)

There were 5 retirements at the end of FY2021:

- Tulika Mitra (NUS)
- Michael Nelson (Old Dominion) (Joined DL Board)
- Phoebe Ayers (MIT) (Joined DL Board)
- Theo Schlossnagle (CTO Circonus) (Joined DL Board)
- Robert Walker (Kent State)

Table 1. *Members of the ACM Publications Board with Roles and Appointment Dates*

Jonathan Aldridge (Carnegie Mellon)	SGB Liaison: 07/01/20 - 06/30/23
Phoebe Ayers (MIT)	Original appointment: 08/01/17 - 07/31/20 Reappointed: 08/1/20 - 06/30/23 Retired from Board: 06/30/21
Jack W. Davidson (U. of Virginia)	SGB Liaison: 04/01/07 - 06/30/10 Appointed Co-Chair: 07/01/10
Chris Hankin (Imperial College)	Original appointment: 07/16/17 - 06/30/20 Reappointed 07/01/20 - 06/30/23 Appointed co-Chair, Assessment & Search Committee: 07/16/18 - present
Michael Heroux (Sandia Labs)	Original appointment: 08/15/19 - 07/31/22 Appointed co-Chair, New Publications Committee: 07/15/20 - present
James Larus (EPFL)	Original appointment: 07/01/20 - 06/30/23
Tulika Mitra (NUS)	Original appointment: 03/13/19 - 03/12/22 Appointed co-Chair, New Publications Committee: 01/08/18 - 01/07/21 Retired as co-Chair, New Publications Committee: 07/14/20 Retired from Board: 08/15/20
Marc Najork (Google Research)	Original appointment: 06/01/20 - 05/31/23

Michael Nelson (Old Dominion University)	Original appointment: 08/01/17 - 07/31/20 Reappointed: 08/01/20 - 06/30/23 Appointed co-Chair, DL Committee: 10/01/17 - 09/30/20 Retired from Board: 06/30/21
Theo Schlossnagle (CTO Circonus)	Original appointment: 01/01/20 - 12/31/22 Retired from Board: 06/30/21
Eugene Spafford (Purdue University)	Original appointment: 01/01/17 - 12/31/19 Reappointed: 01/01/20 - 06/30/23 Appointed Chair, Ethics & Plagiarism Committee: 01/01/17 - present
Divesh Srivastava (AT&T)	Original appointment: 07/01/18 - 06/30/21 Appointed co-Chair, Assessment & Search Committee: 07/01/18 - 06/30/21 Appointed co-Chair, Publications Board: 7/01/21
Bhavani Thuraisingham (UT Dallas)	Original appointment: 07/15/20 - 07/14/23 Appointed co-Chair, New Publications Committee: 07/15/20 - present
Robert Walker (Kent State University)	Original appointment: 07/01/18 - 06/30/21 Appointed co-Chair, Conference Committee: 07/01/18 - 06/30/21 Retired from Board: 06/30/21
Julie Williamson (U. of Glasgow)	Original appointment: 08/01/17 - 07/31/20 Reappointed: 08/01/21 - 07/31/22 Appointed co-Chair, Conference Committee: 07/01/20 - present

B. Publications Board Meetings & Operations

In FY21, as a result of the COVID-19 pandemic, no in person Publications Board meetings were held. Instead, the Board met monthly via Zoom and during the months where an in person meeting would normally be held, typically in July and November, a series of weekly Zoom meetings were held (July 9, 16, 23, & 30 and November 5, 12, & 19) were held to discuss a range of issues..

Highlights of the July 2020 and November 2020 Zoom meetings include:

- Onboarding and orientation of new Publications Board members that joined in FY21
- The Board welcomed guest speaker, Eleonora Presani, new Executive Director of arXiv, to talk to the Board about future plans for arXiv, including a revamp of the user interface, additional functionality, the inclusion of DOIs. new moderation tools, updates to its API.
- The Board welcomed guest speaker, Johan Rooryck, the Executive Director of Coalition S, the organization responsible for Plan S in Europe. Johan spoke in detail about the requirements for Plan S and what ACM needed to do to ensure that all ACM authors are compliant when publishing with ACM. Since that time, ACM has been granted Plan S compliant status

- ACM briefed the Publications Board on progress with ACM Open, ACM's new transformative model for Open Access Publication.
- The results of the Peer Review Task force initiative were presented to the Publications Board, including a proposal for ACM to develop

III. Committees & Project Updates

A. Conference Committee

Mandate

This Conference Committee considers the ACM's conference publication activities and policies. Working closely with the SGB and HQ staff, the Conference Committee works to improve the workflows associated with conference paper submission, open access options, reviewing, and conference program organization. The committee also considers policies and procedures for new conference artifacts such as videos of presentations, posters, demonstrations, code, and other supplementary materials.

FY21 Activities

The Conference committee focused much of its activity around issues related to reviewing, including conference review practices, challenges in recruiting and retaining reviewers, and issues related to review quality and reviewer training and assessment.

An externally-commissioned report examined the practices of our scholarly peers and included surveys of reviewers.

The functions of the conference committee were evaluated in view of the creation of the DL Board with much of the review system and production process work moving to that Board; reviewing work will be continued by the Publications Board as a whole in conjunction with the SGB.

Committee Members

Julie Williamson (co-chair), Robert Walker (co-chair).

B. New Publications Committee

Mandate

The New Publications Committee's primary mandate is to realize the goal of making ACM the preferred publisher in computing through exploration of new publication titles covering the diverse landscape of computing. Towards this goal, the New Publication Committee evaluates submitted proposals for new publications, and the Committee proactively seeks to expand ACM's portfolio by identifying promising new areas and seeking qualified individuals to develop publications in those areas. After development of new title proposals, the committee provides the Publications Board with recommendations and actions regarding the proposal.

FY21 Activities

This committee was substantially re-constituted with new co-chairs, substantially new membership, and new staff support. The committee evaluated several proposed publications while also pursuing strategic opportunities based on prior gap analyses identifying issues in AI, ethics, blockchain, and other areas. The committee also looked at opportunities for co-publishing.

New ACM Publications approved during FY21 were:

- Expansion of the *Proceedings of the ACM on Human Computer Interaction* with the addition of papers from ACM Interactive Surfaces and Spaces (ISS) and CHI Play to the Journal
- *Distributed Ledger Technologies: Research and Practice* to launch in 2023
- *Formal Aspects of Computing* on behalf of the British Computer Society to start publishing in 2022
- *ACM Transactions on Recommender Systems* to launch in 2023

New ACM Publications launched during FY21 were:

- *ACM Transactions on Evolutionary Learning and Optimization*
- *ACM Transactions on Quantum Computing*

Committee Members

Michael Heroux (co-chair), Bhavani Thuraisingham (co-chair), Elena Ferrari, Somesh Jha, Sven Koenig, Amy Bruckman, Ashley Petrylak, Scott Delman, Laura Lander, Jack Davidson, Joe Konstan.

C. Digital Library Committee

Mandate

The Digital Library Committee is charged with strategy and oversight of the Digital Library, including services, features, and content.

FY21 Activities

The major focus of FY21 has been supporting the creation and separate chartering of the ACM DL Board, including the transition of many DL Committee members to that Board effective July 1, 2021.

Committee Members

Michael Nelson (chair), Dina Papagiannaki, Jack Davidson, Stephen Spencer, Phoebe Ayers, Ella Peltonen, Jim Larus, Marc Najork, Mike Heroux, Wayne Graves, Scott Delman, Craig Rodkin

D. Assessment and Search Committee

Mandate

The Assessment and Search (A&S) Committee members assess journals towards the end of each EIC term and make recommendations to the Publications Board regarding reappointments and new searches. Assessments are based on survey feedback from current EICs, SIG Chairs, Associate Editors, and other stakeholders, as well as quantitative data on the journal submission and publication pipeline. When a new search is conducted, the A&S committee members consult with stakeholders to identify a search committee chair and potential committee members, and serve as liaison between the search committee and the Publications Board.

FY21 Activities

In FY21, the Assessment and Search Committee completed assessments and searches for nineteen journals. Twelve new EiCs were appointed and twelve existing EiCs were reappointed.

Journal	EiC Name	Term Start
New Appointments FY'21		
TODS	Chris Jermaine	7/1/2020
TOIS	Min Zhang	8/1/2020
TOPS	Ninghui Li	10/1/2020
TAAS	Valerie Issarny	12/1/2020
TALG	Edith Cohen	12/1/2020
TDS/JDS	Jelena Bradic, Stratos Idreos, John Lafferty	6/1/2021
TCPS	Chenyang Lu	3/1/2021
TWEB	Ryen White	2/1/2021
TAP	Bobby Bodenheimer	6/1/2021
XRDS	Karan Ahuja	3/3/2021
Reappointments FY'21		
TMIS	Daniel Zeng	9/1/2020
eLearn	Simone C.O. Conceição	7/1/2020

TIOT	Gian Pietro Picco, Schahram Dustdar	1/1/2021
TOSN	Yunhao Liu	12/1/2020
TKDD	Charu Aggarwal	10/1/2020
THRI	Selma Sabanovic, Chad Jenkins	1/1/2021
HEALTH	Jack Stankovic, Insup Lee	5/1/2021
TSAS	Walid Aref	7/1/2021
TOCS	Mike Swift	Continuing for 1 year

Regarding *ACM Transactions on Data Science* (TDS), Beng Chin Ooi's tenure as EiC will extend through early 2022. The journal is closing and all accepted papers in the queue will be collected and published as TDS 2:4 in 2022. The transition to the new journal, *Journal of Data Science* (JDS) is in process, and the first issue is expected to be published late Spring 2022.

Committee Members

Chris Hankin (Imperial College London, co-chair), Divesh Srivastava (AT&T, co-chair), Holly Rushmeier (Yale University), Adrian Scoica (Google Switzerland), Josh Tenenber (University of Washington), Louiqa Raschid (University of Maryland), Adelinde Uhrmacher (University of Rostock), Jack Davidson (University of Virginia), Joe Konstan (University of Minnesota), Laura Lander (ACM Journals Manager), Diane Crawford (ACM Deputy Director, Magazines), Scott Delman (ACM Director of Publications).

Diversity, Equity and Inclusion

We have 3 female volunteer members (2 from US and 1 from Europe) and 4 male volunteers (2 from US and 2 from Europe). We have previously had a volunteer from Asia (China) and will seek to recruit new volunteers from outside the US and Europe. We ask Search Committee Chairs to ensure gender and geographic balance in their search committees.

E. Ethics & Plagiarism Committee

Mandate

The ACM Publications Board's Ethics and Plagiarism Committee handles all plagiarism cases and issues dealing with professional ethics in publishing including conflicts of interest, authorship, and allegations of research misconduct. The Committee develops policies and practices to ensure the integrity of the scholarly record.

FY 2021 Activity

In addition to its usual mix of plagiarism and ethics cases, the committee was engaged in an extremely high-profile and complicated case (as part of a Joint Investigative Committee) involving serious allegations of author and reviewer misconduct. This case, which resulted in several of the most severe Publications penalties in ACM history, also served as a basis for exploring key ethics challenges going forward.

2016-2021 Summary of Cases Opened and Closed

YEAR	Ethics Opened	Plagiarism Opened	Plagiarism and Ethics Opened	Ethics Closed	Plagiarism Closed	Plagiarism and Ethics Closed
2016	2	1	0	0	0	0
2017	8	9	1	7	6	1
2018	6	14	2	4	9	1
2019	15	24	5	13	26	4
2020	15	13	5	14	19	7
2021	17	9	3	19	7	3
TOTAL	63	70	16	57	67	16

2017-2021 Ethics and Plagiarism Numbers Active Cases During Each Year

YEAR	Ethics Active Cases	Plagiarism Active Cases	Ethics and Plagiarism Active Cases	Total Active Cases
2017	10	10	1	21
2018	9	18	2	29
2019	20	33	6	59
2020	22	19	7	48
2021	3	4	0	7
TOTAL	64	84	16	164

2017-2021 Ethics and Plagiarism Numbers:

ACM Journals/Magazines Claims	23
ACM Proceedings/Conferences Claims	105
Other Non ACM Publications Claims	21

Types of Ethics Claims

Reviewer Misconduct	26
COI	5
Retaliation	2
Leaving Author Off Work	13
Simultaneous Submission	8
Adding Authors after paper accepted	3
Knowingly submitting a paper with False Information/Findings	7
Looking to Pay to Publish	1
Changing the Author Order	1
Author Contacting Reviewers to Look Out for Paper	5
Research Misconduct	4
Unknowingly submitting a paper with incorrect findings	2
Coercion	1
Misrepresenting a Conference	1

Types of Plagiarism Claims

Plagiarism	67
Self Plagiarism	10
Plagiarism and Simultaneous Submission	2
Plagiarism and Reviewer Misconduct	1

Committee Members

Andrew Adams, Jack Davidson, Scott Delman, Simson Garfinkel, Diana Kelley, Joe Konstan, Michael Kirkpatrick, Eugene Spafford (chair), Stephen Spencer, Julie Williamson, Jenny Waycott.

F. Proceedings of the ACM Steering Committee

Mandate

The PACM Steering Committee is charged with oversight and operation of the PACM Series. In particular, the SC is charged with promoting the PACM Series, soliciting and reviewing proposals for new Titles, as well as making recommendations to the Publications Board on all suggested modifications to existing Titles.

FY21 Activities

The PACM SC continued its management of the series, including finalizing the creation of PACM CGIT, recommending adding content to existing titles (SIGGRAPH Art Papers in PACM CGIT; CHI Play and MobileHCI in PACM HCI; all approved by the Publications Board) and working with SIG and conference leaders on prospective PACM titles.

The PACM series reached a significant milestone with the indexing of its first titles by Clarivate, and progress towards further indexing and Impact Factor assignment.

Committee Members

Roch Guerin (chair), Gregory Abowd, Augustin Chaintreau, Koen De Bosschere, Mashhuda Glencross

IV. ACM Publications Portfolio

ACM is currently the publisher of 93 active periodicals, including 62 journals and transactions, 7 magazines, 29 newsletters, and a series of advanced-level books called *ACM Books*. Total journal submissions (original and revised) to ACM journals in FY21 was 13,032 compared to 10,972 in FY20. The average acceptance rate was 36%

During FY21, ACM added 623 volumes of conference and related workshop proceedings to its portfolio; this included 248 volumes added to ACM's *International Conference Proceedings Series (ICPS)*.

ACM Books launched in 2014, with Ebooks available for both institutional and individual purchase, and print-on-demand books available for sale to individuals. ACM Books published six new titles in FY20, and signed publishing agreements for six additional titles (both the same as FY19).

V. ACM Digital Library & ACM Open

FY21 Content Added to the DL & Platform Usage

While ACM continues to print many of its journals and other publications, the ACM Digital Library (DL) continues to be the primary channel for delivering and reading ACM publications worldwide. In FY21, there were 36.9 million full-text downloads from the ACM DL, an increase of 23% from FY20. This large increase is likely due to both the transition in January 2020 to Atypon's Literatum platform, and ACM decided to open the entire DL for free from April 1, 2020 through July 31, 2020 because of the COVID-19 pandemic. ACM staff estimates between 3-5 million users. During FY21, 34,516 full-text articles were

added to the ACM DL, bringing ACM's total DL holdings to 636,128 full-text articles. Of the full-text articles added to the DL in FY21, it is estimated that approximately 25k of these are full-length peer-reviewed research articles.

ACM's *Guide to Computing Literature* is integrated with the ACM Digital Library, providing an increasingly comprehensive and freely available index to the top-tier literature of computing. During FY21, approximately 43,500 works were added to the bibliographic database, bringing the total Guide coverage to 2.99 million works. This is roughly 45% of the normal number we add to the Guide as a result of the continued transition to Literatum processing of non-ACM metadata feeds. We resolved a few major roadblocks late in FY21 and we now see numbers increasing month over month. Capturing article references in the database is important, because these references are necessary to develop robust citation statistics. ACM continues to expand the number of articles from which this data is captured.

Recent growth is as follows:

As one of the leading full-text and bibliographic databases of scholarly information for the computing community, the DL is widely accessible to individuals and institutions around the world. Out of ACM's roughly 104,000 individual members (including students), approximately 24,300 subscribed to the DL in FY20 (a decrease of 5.8%)

FY21 ACM Digital Library Renewals

ACM Publications continues to receive the bulk of its annual revenues via institutional "read only" subscriptions to the ACM Digital Library, with most of this business coming through roughly 100 academic consortia representing 2,500 institutions, and an additional 200 corporate and government accounts. It would seem the COVID-19 epidemic had a noticeable impact on FY21 "read only" license attrition rates: ACM saw roughly twice the number of cancellations vs prior year, with Russia and Mexico being notable cancellations. This increase undoubtedly came from relatively low use institutions that were forced to reduce budgets in the wake of COVID. The academic sector as a whole was greatly damaged financially due to the lack of overseas student tuition because of COVID-related travel restrictions, and these unfortunate effects are expected to continue in future budget cycles.

More positively, ACM has seen consistent growth on the non-academic side and effectively doubled its increase in net revenue compared to the prior year. Also of note was a new partnership with the Research4Life program, which provides free access to online resources to institutions in developing nations. Through this new partnership, ACM is providing free access to the ACM Digital Library to approximately 1,450 institutions across 72 nations.

FY21 ACM Open Progress

ACM launched its transformative Open Access licensing model, ACM OPEN, in January 2020 with the signing of 3-year license agreements with the University of California System, Carnegie Mellon University, Massachusetts Institute of Technology, and Iowa State University. The ACM OPEN license provides an institution's corresponding authors the ability to publish an unlimited number of Open Access research articles in the DL and full institutional access to the rest of the DL's subscription contents. By the close of FY21, ACM had successfully signed ACM Open licenses with 111 institutions, with 49% of these institutions based in North America, 35% based in Europe, with the remainder of licenses being signed with institutions in Asia, the Middle East, and Africa. A complete up-to-date list of ACM Open institutions is available [here](#). By the end of FY21, approximately 12.5% of research articles published by ACM annually

will be made Open Access upon publication as the result of either authors choosing to pay an Article Process Charge (APC) or the Corresponding Authors of accepted articles being affiliated with ACM Open institutions.

VII. ACM Magazines

FY21 Data

ACM's magazine titles had a fruitful fiscal year (<https://dl.acm.org/magazines>). In FY21, content from ACM's magazines generated a great number of downloads from the ACM Digital Library. Moreover, all print magazines provide access options that expand their readerships far beyond print: including dedicated and dynamic websites, Digital Editions, and mobile apps that offer content on a variety of devices and include an assortment of value-added functionality.

Communications of the ACM is the Association's flagship publication and principal title among magazines. FY21 proved a record-setting year for downloads from this monthly publication—with almost 4 million reported. In addition, *Communication's* online presence shares content on a global scale. In FY21, traffic on cacm.acm.org site grew from 3.4 million pageviews in FY20 to 3.8 million. Its mobile site recorded over 1 million, an increase of 27% over the previous year. *Communications* regional special sections continue to garner a strong following. These sections spotlight technologies and research emerging from distinct regions of the world; in FY21, special sections highlighted the technology communities within the regions of Latin American and Arabia.

Interactions, ACM's magazine serving the disciplines within human-computer interaction, recorded over 700,000 downloads, almost triple that of FY20. The publication has expanded its coverage in the last 18 months to include such issues of social justice, gender/global inequities, and sustainability concerns—giving a platform to new voices for change within the HCI community. *Interactions'* website logged over 355,000 pageviews from almost 220,000 unique visitors, an increase of 28% over FY20.

Other ACM magazines also continue to draw impressive, expansive audiences online. *eLearn* magazine—ACM's online publication for e-learning research and practice— continues to attract educators and training professionals from around the world. In FY21, *eLearn* Magazine served almost 505,000 DL downloads, and its website recorded over 277,000 pageviews and 177,300 users. *Ubiquity*, an online-only publication dedicated to advancing critical analysis and commentary on issues linked to the IT profession, counted almost 418,000 downloads, and logged almost 230,000 pageviews and over 173,000 users in FY21.

VIII. ACM Books

The ACM Books program started in 2014 in response to a lack of moderately priced, high-quality computer science books caused by consolidation among commercial publishers. The series focuses on four types of books: graduate-level textbooks, practitioner-oriented professional books, research monographs in established and emerging fields, and books devoted to the history and social impact of computing.

Two new ACM Books titles were added to Collection II in FY21, bringing the total in the collection to ten. These titles were:

Intelligent Computing for Interactive System Design: Statistics, Digital Signal Processing, and Machine Learning in Practice, by Parisa Eslambolchilar, Andreas Komninos, Mark Dunlop (328 downloads)

Event Mining for Explanatory Modeling, by Laleh Jalali and Ramesh Jain (146 downloads)

More than 295 ACM Books collections have been sold to institutions to date for both Collections 1 & 2, with individual titles being made available to consumers via major online retailers. All ACM Books content is also available to ACM members for an annual fee and during FY21 there were 1,116 active ACM member subscriptions to the ACM Books program.

IX. International Conference Proceeding Series (ICPS)

The ACM International Conference Proceedings (ICPS) publication numbers have decreased over the last two fiscal years. During FY21 the ICPS board doubled and became extremely active. The cancellation of many conferences due to the pandemic has led to the decline in publication output for the series. In addition, the Publications Board is currently evaluating the quality of the review process and of proceedings from certain conference sponsors. We are also looking forward to welcoming new editorial staff provided by HQ to support the series.

ICPS produced 248 proceedings volumes (277 FY20) and 10,333 articles (10,873 FY20) from 50 countries outside the United States in FY21. In addition to the 248 published volumes an additional 127 were rejected. The FY21 vs FY20 application rejection rate 34% and 11% respectively.