

Annual Report of the Publications Board

For the Period July 1, 2016 – June 30, 2017

Submitted by: Jack W. Davidson and Joseph Konstan, co-Chairs

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I. Strategic Vision & Directions

Publications is one of ACM's largest activities and lines of business. The Publications Board oversees a broad portfolio of activities including publishing journals, magazines, books, and conference and workshop proceedings (both together with ACM's SIGs and directly through the International Conference Proceedings Series); overseeing all publications policies, ethics and plagiarism cases, and author rights; and overseeing the ongoing development of the ACM Digital Library and the broad set of services it provides to scholars, authors, and institutions. The Publications Board is comprised of volunteers from the community and works in partnership with and is supported by ACM's publications staff, and by staff in other ACM units, as their activities relate to publications (e.g., IS, SIG Services).

In all matters, the Publications Board seeks to maintain and strengthen ACM's position as the preferred publisher of computing research and to extend our reach to become a leading provider of advanced level content and services for the broader computing industry. At the same time, the Board takes seriously its responsibility for the sustainability of ACM's publications program, working with ACM staff to ensure that ACM's publications and their related business models and pricing both remain competitive for subscribers and authors and generates sufficient revenue to sustain a responsible publishing operation.

Launching new publications will be a fundamental component of strengthening ACM's publications portfolio. During the course of F'16, the Publications Board identified several key areas where expansion of the program through new publications and content types is likely to have the greatest impact on the community in the future.

FY 2017 has been a pivotal year for ACM Publications. Building on years of prior work, several key achievements came to fruition during this year:

- The launch of the new *Proceedings of the ACM* journal series, with four titles. This series provides a venue for high-quality conferences that adopt journal review practices (including supporting revision and re-review) to publish their work in a journal title. The Board continues to work with the SIGs to build the list of PACM titles and staff will be working with Clarivate Analytics and other indexing services to ensure that the new Series has the maximum amount of visibility to the Computing Community and obtains impact factors and the tracking of other critical impact metrics.
- Major milestones in ACM's Reproducibility initiative, including full rollout of the Artifact Evaluation and replication badges, and further milestones in ACM's effort to evaluate software solutions for archiving code.
- Completion of a wide-scale market research project focused on the ACM DL coordinated by HQ staff and led by the management consultancy Greenhouse Associates. A number of key findings from the project led to the development of a new plan for the next-generation ACM Digital Library, for which implementation will begin in FY 2018. Key elements of the plan include the development of a new Digital Library platform with new search functionality, a new user interface, a responsive mobile version, a new underlying technology infrastructure, increased conference-specific functionality and search capabilities, and the development and integration of a pre-print service for the computing community.
- A more proactive approach to building the ACM Publications program, including the addition of dedicated editorial staff to spearhead this initiative. This program is starting to bear fruit in both the ACM Books series and in working to develop and vet new journal publication proposals.

Furthermore, FY 2017 started a process (continuing into FY 2018) of refreshing and diversifying the Publications Board itself. Four long-time members have retired or announced plans to retire in FY 2018. New members have been recruited with a focus on four key goals:

- Increasing representation from around the world, including new members from South America, Europe, and Asia.
- Maintaining diverse membership across sub-discipline and demographics.
- Coordinating with the Future of Computing Academy (FCA) to attract emerging leaders to service on the Publications Board and its committees, and to cooperate with FCA’s publications-related initiatives.
- Recruiting members who can contribute to the Board’s key focus areas for growth, including industry-targeted publications, emerging and underrepresented areas in our publications portfolio (e.g., Big Data, AI, Health Computing), and DL services.

Looking forward to FY 2018, the Board will continue these initiatives while focusing more extensively on strategic growth in our publications program (including potential acquisitions and joint ventures), expansion of services to authors (including a likely pre-print service, possibly in partnership with ArXiv), and expanded opportunities for practitioner-oriented publication.

II. Basic Information

A. Members of the Publications Board

A list of members of the Publications Board during FY 2017 is given in Table 1. One new member was appointed to the Board during FY 2017:

- Eugene H. Spafford, professor of computer science at Purdue University, was appointed and serves as chair of the Ethics & Plagiarism Committee.

There were two resignations in FY2017: Ron Boisvert and Mary Lou Soffa

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

Ronald Boisvert (<i>NIST</i>) <i>Chair, DL Committee</i>	Original appointment as Chair: 7/1/97 – 6/30/00 Vice Chair for Electronic Publishing: 5/8/00– 6/30/00 Reappointed: 7/1/00 – 6/30/03 Reappointed: 7/1/03 – 6/30/06 Co-Chair of DL Committee: 1/1/05 – 6/30/07 Reappointed: 7/1/07 – 6/30/10 Reappointed: 7/1/10 – 6/30/13 Appointed as member 7/1/13 – 6/30/14 Reappointed: 7/1/14 – 6/30/17
Anne Condon (<i>University of British Columbia</i>) <i>Co-chair, Assessment & Search</i>	Original appointment: 6/01/15 – 5/31/18 Appointed Co-Chair of Assessment & Search Committee: 5/1/15 – 4/30/18
Jack W. Davidson (<i>U Virginia</i>)	SGB Liaison: 4/1/07 – 6/30/10 Appointed Co-Chair 7/1/10 – 6/30/13 Reappointed: 7/1/13 – 6/30/16 Reappointed: 7/1/16 – 6/30/19
Nikil Dutt (<i>UC Irvine</i>) <i>Chair, New Pubs Committee</i>	Original appointment: 7/1/08 – 6/30/11 Reappointed: 7/1/11 – 6/30/14 Appointed as Chair, New Pubs Committee: 8/1/14 – 7/31/17 Term extended: TBD
Roch Guerin (<i>Washington U</i>) <i>Chair, Conferences Committee</i>	Original Appointment 3/1/13 – 2/29/16 Reappointed: 3/1/16 – 2/28/18 Appointed Chair of Conference Committee: 11/1/13 – 10/31/16 Term extended: 10/31/16 – 10/31/17

Carol Hutchins (<i>NYU</i>)	Original appointment: 1/1/97 – 12/31/02 Reappointed: 1/1/03 – 12/31/05 Term extended: 1/1/06 – 12/31/06 Term extended: 1/1/07 – 12/31/10 Term extended: 1/1/11 – 12/31/13 Term extended: 1/1/14 – 12/31/14 Term extended: 1/1/15 – 12/31/15 Term extended: 1/1/16 – 12/31/16 Term extended: 1/1/17 – 12/31/17
Yannis Ioannidis (<i>University of Athens</i>) <i>SGB Publications Advisor</i>	Original appointment: 7/1/14 – 6/30/16 Reappointed: 7/1/16 – 6/30/18
Joseph Konstan (<i>U Minn</i>)	SGB Liaison: 7/1/10 – 6/30/13 Appointed Co-Chair: 7/1/13 – 6/30/16 Reappointed: 7/1/16 – 6/30/19
M. Tamer Özsu (<i>U Waterloo</i>)	SGB Liaison: 12/1/02 – 11/30/04 Appointed regular member: 12/1/04 – 11/30/07 Extended several terms: 12/1/07 – 10/1/17 Appointed Vice Chair for New Publications: 7/1/07 – 7/31/14 Reappointed: 8/1/14 – 7/31/17
Mary Lou Soffa (<i>U Virginia</i>) <i>Chair, Journal Search and Assessment Committee</i>	Original appointment: 2/1/05 – 1/31/08 Term extended: 2/1/08 – 1/31/09 Reappointed: 2/1/09 – 1/31/12 Term extended: 2/1/12 – 12/31/15 Term extended: 1/1/16 – 12/31/16 Term extended: 1/1/17 – 12/31/17 Appointed Chair of Assessment & Search Committee: 11/1/13- 4/30/15 Appointed Co-Chair of Assessment & Search Committee: 5/1/15 – 7/31/17
Alexander Wade (<i>Microsoft Research</i>) <i>Chair, Technology Committee</i>	Original appointment: 5/01/15 – 4/30/18
Terry Coatta (<i>Marine Learning Systems</i>) <i>Co-Chair Practice Committee</i>	Original appointment: 4/1/16 – 3/31/19
Karin Breitman (<i>EMC Corporation</i>) <i>Co-Chair Practice Committee</i>	Original appointment: 6/1/16 – 5/31/19
Keith Webster (<i>Carnegie Mellon University</i>)	Original appointment: 10/1/15 – 9/30/18

B. Publications Board Meetings & Operations

In FY'17, the Publications Board and HQ staff held three in person meetings (October 2017, January 2017, and June 2017) and nine monthly conference calls.

During the three in person meetings, a number of discussions and decisions took place, including:

- The appointment or reappointment of various ACM journal and magazine Editors-in-Chief.
- The approval to launch the new *Proceedings of the ACM* journal series, including unanimous votes to launch the first 4 individual titles in the Series and appoint EICs for each of these titles.
- The preliminary decision to transition several ACM journals over to a Gold Open Access model.
- The decision to continue co-publishing the IEEE/ACM TCBB journal with IEEE.
- The decision to launch and distribute new ACM authoring templates for journals and conference proceedings.
- The decision to utilize Hybrid Open Access APC income to underwrite initial APC embargo periods for ACM Gold OA journals.

- The preliminary approval to launch a new ACM journal on Big Data (subsequently renamed ACM Transactions on Data Intensive Computing).
- The decision to merge the DL and Technology Committees of the Publications Board.
- It was announced that CACM's long time EIC, Moshe Vardi, would step down at the end of June 2017 and that the EC has appointed Andrew A. Chien as the new EIC as from July 1, 2017.

In addition, the Publications Board hosted a full-day meeting in Seattle on May 31 with approximately a dozen EIC's of ACM journals and magazines to discuss a variety of editorial related issues.

It is also noteworthy that ACM's Director of Publications, Bernie Rous, stepped down as Director of Publications on December 31, 2016 as part of his semi-retirement and ACM appointed Scott Delman ACM's new Director of Publications, effective January 1, 2017.

III. Committees & Project Updates

A. Conference Committee & Projects

Committee Members

Koen De Bosschere, Jaudelice de Oliveira, Steven Feiner, Lance Fortnow, Mashudda Glencross, Roch Guerin (Committee Chair), Joe Konstan, Crista Lopes, Tamer Özsu, Mary Lou Soffa

Mandate

Following the launch of the PACM series, the primary mandate of the committee was to solicit and review proposals for new PACM titles. As the guidelines for submissions of new PACM titles were still evolving, the committee was both tasked with updating those guidelines for clarification and completeness, and with interfacing with proposers to provide feedback on proposals for new titles and ensure that they ultimately converged to a structure consistent with the expectations for the series. This called for an iterative process with feedback provided in each round towards addressing concerns that may have been present in the original proposals. In spite of its somewhat ad hoc beginning, the review process proceeded reasonably smoothly and expeditiously. Five PACM proposals were reviewed and four were approved as listed below, with the fifth subsequently resubmitted and currently under review after undergoing revisions.

New Journals

In FY'17, the Publications Board approved four PACM journals proposals presented by the conference committee. The issues of the PACM series published in FY'17 are as follows:

- *Proceedings of the ACM on Measurement and Analysis of Computing Systems (POMACS)* was approved by the Publications Board in FY'16. The issue will appear twice yearly in the first year. The first issue was published in June 2017, and the second issue should be online mid-December.
- *PACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)* was approved on 7/20/2016. The journal will publish quarterly. The first two issues of the year have been published online in the DL (in March and June 2017), the third is scheduled for September, and the fourth will appear in December.
- *PACM on Programming Languages (PACMPL)* was approved on 7/20/2016. On 2/17/2017, the Publications Board voted to make this Gold OA for three years as an experiment. The journal will publish two issues in 2017. The first issue will appear in August 2017 and the second issue in October.
- *Proceedings of the ACM: Human-Computer Interaction (PACMHCI)* was approved on 1/12/2017. The journal will publish twice yearly until further conferences are approved for this journal. The first issue was online at the end of June 2017. The second issue will be published in November.

As alluded to above, a fifth proposal from SIGGRAPH for a PACM journal on Graphics was also considered in FY'17. The proposal was reviewed by the Conference Committee and Publications Board and returned to SIGGRAPH with comments. (A revised proposal was subsequently submitted at the start of FY'18, and is currently under review.)

B. New Publications Committee & Projects

Mandate and Scope:

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. The titles being pursued are primarily new journals and transactions, but the committee is also looking into opportunities for mergers/acquisitions of existing titles that may have a presence in areas of interest to ACM.

The committee also liaises with the Practice Committee to investigate possibilities for hybrid journal/magazine titles in topical areas where there is significant interplay between basic research as well as practical applications.

The committee operates in two modes: 1) Reactive, where incoming (often unsolicited) proposals are evaluated, and 2) Proactive, where the committee attempts to expand ACM's portfolio and footprint of publications by looking at strategic areas and opportunities.

After evaluation of new title proposals, the committee provides the Publications Board with recommendations and actions regarding proposal development.

Committee Members:

Nikil Dutt (UC Irvine, Committee Chair), Jack Davidson (Univ. Virginia), Susanne Hambrusch (Purdue), Wendy Mackay (INRIA Saclay), Tamer Ozsü (Waterloo), Carol Hutchins (NYU), Karin Breitman (EMC, Practitioner Committee Liaison), Steve Welch (ACM HQ), Scott Delman (ACM HQ)

Issues addressed in FY 2017 (July 2016 - June 2017)

The Committee is exploring new publications in several high-priority areas, including Data-Intensive Computing, the Internet-of-Things, and Middleware. With the help of Steve Welch, the committee is also aggressively revisited opportunities for new titles, as well as for acquisitions, mergers, and partnerships with existing (non-ACM) titles.

Specific achievements and projects in progress during FY 2017 (July 2016 - June 2017)

New Titles:

The committee **recommended** the following proposals for new titles:

- **Digital Threats:** This is a research-and-practice title focused on digital security through analysis, experiments, case studies. The Publications Board approved the title, but is now awaiting selection of an academic Co-EiC to assist Co-EiC Leigh Metcalf for the title's leadership
- **ACM Transactions on Data Intensive Computing (ACM TDIC):** A preproposal was developed in 2016 to scope out a new title in the space of data intensive computing and big data. With the help of Tamer Ozsü, in May 2017 the committee received an updated proposal for ACM TDIC, with Beng Chin Ooi (NUS Singapore) agreeing to serve as the inaugural EiC. The Publications Board approved the idea in principle, suggesting some minor changes in scope and additions for possible Editorial Board members to improve topical, geographic and gender coverage. The final proposal was sent back to the Publications Board on July 25 for feedback from the SIGs and other EiCs.

Acquired Title:

- **ACM Transactions on Human-Robot Interaction (THRI):** The committee evaluated a proposal from the independently published *Journal of Human-Robot Interaction* for ACM to take over responsibility for publishing. Founded in, the Journal of Human-Robot Interaction was initially launched to serve as the premier peer-reviewed interdisciplinary journal in the field. The journal covers the convergence of technology development and social understanding to capture the full spectrum of robotics. The committee approved the proposal, and the rebranded publication will launch under the ACM name in January 2018.

Plans for next fiscal year (July 2017 - June 2018)

The committee would like to close on proposals for IoT, Middleware, and explore opportunities for growth in both "traditional" areas where ACM lacks presence, as well as emerging areas such as Digital Health. The

committee will continue to provide feedback and evaluate proposals for mergers, acquisitions and partnerships.

C. Digital Library / Technology Committee & Projects

DL / Technology Committee Members: Alex Wade (chair), Ron Boisvert, Michel Beaudouin-Lafon, Jack Davidson, Nik Dutt, Mark Gross, Jonathan Grudin, Jack Davidson, Nik Dutt, Mark Gross, Jonathan Grudin, Roch Guerin, Joshua Hailpern, Carol Hutchins, Michael Lesk, Gary Marchionini, Samantha Merritt, Dina Paggiannaki, Henning Schulzrinne, Stephen Spencer, Changsheng Xu, Bernie Rous, Wayne Graves, Scott Delman, Craig Rodkin

Key findings from Greenhouse Associates report provide us with a plan for the next-generation ACM Digital Library, for which implementation will begin in FY 2018. Digital Library development will include new: underlying technology infrastructure, search facility, user interface, responsive mobile version, increased conference-specific functionality and search capabilities. The development and integration of a pre-print service for the computing community will also start in FY 2018.

The ACM Task Force on Reproducibility has been working with ACM conferences and journals to understand and articulate common best practices in preparing and reviewing artifacts, and how to reflect them in publication and enable their re-use. Pilot integration was completed for 3 live cases and is available on www.dl.acm.org. Artifact review badges are now being added on a regular basis to papers which have gone through the review process. We continue to work and are making strides on automating all processes.

We continue to work on enhanced article formats and templates to better support small-screen devices, accessibility, and other uses of articles. This past year we released a consolidated TeX and Microsoft Word template. This template concatenated and updated the code for 7 existing ACM journal, ACM proceedings, and SIG proceeding templates. While we still have some hurdles to cross in regards to accessibility and readability in the template, we now have a stable foundation for which the output can be developed independently and in compliance with known accessibility and readability standards.

Development of the new production platform continues and is set to go live in FY 2018. The production system integrates Conference Management Systems (e.g., EasyChair, HotCRP, etc.) with the ACM eRights system and Conference database. The platform will streamline data entry, data transfers and production processes for conference leaders, SIG staff, and most importantly authors. The production system will also provide our readers with the option to read articles on multiple platforms where all ACM articles have a similar “look and feel”. Readers will have the choice of the traditional PDF or responsive HTML5 files which can be viewed across all devices.

D. Assessment and Search Committee & Projects

Mandate: 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, 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.

Current members: Anne Condon, U. British Columbia (co-chair), Chris Hankin, Imperial College London (co-chair), Laura Lander (ACM Journals Manager), and Holly Rushmeier, Yale University. Mary Lou Soffa (former co-chair) and Krish Chakrabarty have stepped down in the past year, and Chris recently agreed to serve as co-chair.

Work completed in the past year: The committee assessed a total of nineteen journals and coordinated searches for new EICs (or co-EICs) for thirteen of these journals. EICs were reappointed for the remaining six journals (see table below). Including co-EIC appointments this entailed 21 appointments; 11 of these are US-based, six are based in Europe, three in Asia and one in South America. Only two of the appointments are women and there were two appointments from industry.

Issues addressed: (i) We are continuing to refine the assessment and search processes, and to develop protocols to handle unusual cases. One example in the past year is a new protocol for handling replacements of a co-EIC when one of two co-EICs steps down. (ii) We have started to gather and use more comprehensive statistics on the publications pipeline for recently assessed journals, to help us in understanding the numbers for a particular journal that is undergoing assessment. (iii) We consulted with the Publications Board leadership team in considering a Digital Biomarkers Journal partnership with Karger Publishers: provided feedback on a proposal, identified people to consult with, drafted a letter for reaching out to them.

Plans for the coming year (July 2017-June 2018): (i) We plan to appoint new committee members, given that two members have stepped down. (ii) We will continue to work proactively with search committees to identify ways to encourage more women to take on EiC roles, and identify new approaches that we might take to be more effective on this front.

E. Ethics & Plagiarism Committee & Projects

Members: Eugene Spafford (chair), Deborah Cotton, Amy Bruckman, Victoria Stodden, Simson Garfinkel, Catherine McGeoch, Joe Konstan, Scott Delman, Deborah Cotton

The ACM Publications Board's Ethics and Plagiarism Committee places the investigation of each claim of plagiarism at the highest priority for resolution and action. The basics are outlined here <http://www.acm.org/publications/policies/plagiarism-overview> and specific details of all aspects of reporting and investigating claims, and penalties for plagiarism are [found here](#).

The current makeup of the E&P Committee is in transition. Catherine McGeoch resigned as chair and is succeeded by Eugene Spafford. The Board is currently looking for additional candidates to fill out this committee.

The E&P Committee receives several new claims of alleged plagiarism and possible ethical misconduct each year. Claims of plagiarism are investigated through the Crossref's iThenticate® Similarity Check plagiarism detection tool as well as side-by-side comparison. Of the fourteen cases received thus far in 2017 alone, nine are closed, five are in various states of review and/or resolution and new cases are received almost weekly. However, the committee has noted an apparent trend toward cases that involved ethical issues common to the publication of research data resulting from collaborative efforts, rather than actual plagiarism or copyright infringement.

To accommodate this trend, we will begin to consider if and what we might need as a policy or set of guidelines for dealing with human data issues with regards to the new U.S. Common Rule for human subjects, the existing Helsinki Convention, etc., as well as issues of basic ethical treatment and alignment with overall ACM Codes of Conduct.

We will coordinate with the ACM Ethics Taskforce on coverage of issues of bullying that can manifest themselves in publishing. We will also be investigating COPE (Committee on Publishing Ethics) that has membership of several hundred other publishers to see if (a) it aligns with ACM policies, and (b) whether we should join it.

In addition to regular review of allegations of plagiarism in ACM Publications and assistance to Editors and Program Chairs in handling complex plagiarism allegations in both submitted and published work, the Committee is exploring a variety of policy issues related to authorship, particularly regarding post-publication author name changes and starting a study of post-review author list changes to better understand the phenomenon.

The E&P Committee will continue to update the Plagiarism Policy as needed. Access to the Crossref iThenticate software has also been extended to ACM SIG conferences and workshop program chairs.

F. Practice Committee & Projects

Liaisons to the Practitioners: Terry Coatta, Karin Breitman

As liaisons to the Practitioners Board, Terry and Karin helped shape the proposal for a new journal entitled **Digital Threats: Research & Practice**, evaluated two book proposals (digital project management and IoT), and are supporting the search for potential new authors for the ACM book series.

The liaisons are in the process of forming a practitioners subcommittee to serve the **Publications Board**. The creation of the subcommittee was approved on May 1st by the Practitioners Board and later sanctioned by the Publications board. The goal of said subcommittee is to help develop 2-3 new publication projects in the next twelve months that are tuned to industry trends and the needs of the practitioner community. To this effect, we are in the process of forming the group, whose first meeting should take place in the beginning of September. The first line up is as it follows:

- Jing Yang, AI Era, China (confirmed)
- Inés Sombra, Papers we Love, US (confirmed)
- Rafee Tarafdar, Infosys, India (confirmed)
- Adrian Colier, EU (to be confirmed)

Jing Yang

Jing YANG, former Zenith Media Media Purchasing and Consulting Deputy Director, Management Consultant of China Economic Net (中国经济网). In 2014, Ms. Yang planned a series of seminars on AI and big data, such as "Approaching The Singularity", "The Algorithm Empire", and "Human and Robot in the Era of Big Data."

In March 2015 Ms. Yang with her team and Machinery Industry Press jointly organized the AI Tech forum "New Intelligent Age." In May 2015 she was invited as the host of important forums for several top tech meetings, such as the "Expert Forum on Intelligent Social Science and Technology" on the Annual Meeting of China Association for Science and Technology Association (CAST), and the sub-forum "Artificial Intelligence Opens The Robot New Era" on 2015 Robot World Cup Industry Summit & World Robot Congress.

In September 2015, she founded AI Era, and published the monograph "AI Era: Machine + Human = Super intelligent Age." In October 2016, Ms. Yang led AI Era co-sponsored a world-class AI conference "2016 AI WORLD," and published the "Report on China Artificial Intelligence Industry Development." In March 2017, co-hosted the AI summit with theme on Open source and Ecosystem.

AI Era

AI Era was founded in 2015. Now it's the leading AI-focused platform in China that facilitates information, insight and talent exchange in the AI industry through our multimedia channels, including social media, online subscriptions, and many closed and open events, online and offline. AI Era is not only a content creator interpreting the latest technology trends but also an event organizer uniting industry leaders and scientists alike to make AI technologies the most useful to human beings. AI Era hosts two AI Tech Summits every year, so far has successfully held three conferences attracting more than 3000 attendees in total.

Currently, AI Era has around 17,000 subscribers, of which more than 60% are AI practitioners all around the world. Also, AI Era has a pool of about 3000 experts in the AI field, who share their knowledge every day in sub-areas such as machine learning, deep learning, natural language processing, image processing, computer vision, autonomous driving, robotics, and Internet of Things, etc. Every month, there is a face-to-face Tech Talk on a specific topic presided by the most prestigious experts from academia and/or industry.

The information and insights created or shared by AI Era are assets not only to the public but also to startups, venture capitals, large corporations, universities, research institutes, and the government. AI Era is aimed to create a robust and energetic ecosystem of AI in China, and committed to promoting the exchange of AI between China and the world.

Inés Sombra

Inés Sombra is the Distributed Systems Directory at Fastly, where she spends her time thinking about the provisioning, configuration, and backups of data stores. Ines holds an M.S. in Computer Science and an M.S. in Information Management from Washington University in Saint Louis. Being a true Argentine, she has a fondness for steak, fernet, and a pug named Gordo.

Fastly/Papers we Love

Fastly helps the world's most popular digital businesses keep pace with their customer expectations by delivering fast, secure, and scalable online experiences. Businesses trust the Fastly edge cloud platform to accelerate the pace of technical innovation, mitigate evolving threats, and scale on demand. Founded in 2011, Fastly powers online destinations including Airbnb, GitHub, Alaska Airlines, Pinterest, Vimeo, The Guardian, The New York Times and Ticketmaster.

Paper We Love (PWL) is a community built around reading, discussing and learning more about academic computer science papers. This repository serves as a directory of some of the best papers the community can find, bringing together documents scattered across the web.

Rafee Tarafdar

Rafee is a VP and Unit Technology Officer (CTO) within Global Delivery organization at Infosys. In this role, he leads the Enterprise Architecture practice across industry segments, driving enterprise architecture and technology solutions for large and complex transformation programs cutting across Custom Application Development, BI & Data Analytics, Cloud & infrastructure and Enterprise Packages & Platforms. Additionally he also provides technology leadership to the Legacy Modernization solution across the organization and mentors, guides architects within the global delivery organization.

Rafee has played diverse roles from setting up successful architecture & technology teams globally, providing advisory services to senior executives of fortune 500 organizations and playing the role of CTO & Enterprise architect for large transformation programs. Prior to Infosys he used to architect, design and develop products and platforms for Virtusa, Misys and Cadem

Infosys

Infosys Limited is an Indian multinational corporation that provides business consulting, information technology and outsourcing services. It has its headquarters in Bengaluru, India. Infosys is the second-largest Indian IT services company by 2016 revenues.[4] On January 12, 2017, its market capitalisation was \$34.38 Billion.[5]

G. Business Working Group & Projects

Members: Joe Konstan (chair), Jack Davidson, Pat Ryan, Liz Zhang, Bernie Rous, Scott Delman

During FY'17, the Committee continued to look at possible cost savings opportunities relating to the ACM Publications programs, made several recommendations to the ACM Publications Board regarding how ACM can utilize part of the established and growing Hybrid Open Access Fund to help underwrite the costs of Gold OA publication, both for new journals that ACM acquired in FY'17 and existing ACM journals under consideration for transition to Gold OA in 2018 and beyond. The Committee continues to be a resource to advise the Publications Board on business and finance-related issues with ACM's Publications Program.

IV. ACM Publications Portfolio

ACM is currently the publisher of 83 active periodicals, including 48 journals and transactions, 8 magazines, 30 newsletters, and a new series of advanced-level books called *ACM Books*.

During FY 2017, ACM added 602 volumes of conference and related workshop proceedings to its portfolio; this included 160 volumes added to ACM's *International Conference Proceedings Series (ICPS)*, a 24% increase over FY 2016.

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 five new titles in FY 2017, and signed publishing agreements for six additional titles.

V. ACM Digital Library

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 FY 2017, there were approximately 6 million users of the Digital Library, accessing the DL from 161 countries and generating approximately 17.5 million full-text downloads. During FY 2017, 29,000 full-text articles were added to the ACM DL, bringing ACM's total DL holdings to 450,000 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 FY 2017, more than 140,000 works were added to the bibliographic database, bringing the total Guide coverage to 2.70 million works. 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 in which this data is captured.

Recent growth is as follows:

Year	Total References	Resolved in Guide
2008	6.3M	2.2M
2009	7.8M	2.8M
2010	9.8M	3.4M
2011	13.1M	4.7M
2012	16.8M	6.0M
2013	18.9M	6.7M
2014	20.8M	8.4M
2015	23.5M	9.2M
2016	25.9M	10.4M
2017	28.8M	11.4M

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 100,000 individual members, approximately 25,500 subscribed to the DL in FY 2017.

Institutional subscriptions to the DL continue to be a key source of revenue for ACM. At the close of FY 2017, the ACM DL is available at 2,855 institutions from over 89 countries around the world, including 183 government institutions and corporations. The relatively mature academic market in the United States, Europe and East Asia continues to show steady annual growth due to new consortium member participation and annual renewal rate increases, while new subscription business with significant impact in FY 2017 included licenses from Saudi Arabia and Lithuania. Corporate and government markets continue to be a core focus for growth, and FY 2017 showed new subscription licenses from a variety of corporate and government institutions in new sectors such as automotive and television, alongside the more traditional areas of electronics, aerospace, internet, and intellectual property research. Institutional take-up of the ACM Books Collection I (hosted in the DL) continued to build momentum as well.

ACM continues to monitor institutional usage of the DL as it relates to subscription price, most notably in the "cost per full-text article download" metric. In an effort to distribute subscription fees more equitably based on usage, ACM has continued a policy of assessing higher annual renewal rate increases to the more research-intensive subscribers so that the cost per article figure is more uniform worldwide. ACM has also continued an "anti-double-dipping" policy of returning the net revenue from hybrid open access (OA) article processing charges (APCs) from the previous year to those academic libraries renewing their DL subscriptions the following year.

VI. ACM Magazines

ACM publishes 8 magazine titles. In FY17, content from ACM's magazines continued to generate an enormous amount of downloads from the ACM Digital Library. Moreover, all print magazines include a Digital Edition as well as mobile apps that now offer magazine content on a variety of devices.

Foremost among the magazines is ACM's monthly flagship, *Communications of the ACM*. Over two million *Communications* articles were downloaded in FY17 from the ACM Digital Library. *Communication's* Web presence shares content on a global scale. In FY2017, traffic on cacm.acm.org grew to over one million users (from 943,000 in FY16) and to almost two millions page views. Its mobile site recorded over 200,000 users and 340,000 page views.

In other *Communications* news, ACM's Executive Committee's appointment of Andrew Chien as the new Editor-in-Chief of the monthly flagship. Chien, whose term began July 1, is the William Eckhardt Distinguished Service Professor of Computer Science and the Director of the CERES Center for Unstoppable Computing at the University of Chicago. He is also a Senior Computer Scientist at the Argonne National Laboratory. Chien succeeds Moshe Y. Vardi, the Karen Ostrum George Distinguished Service Professor in Computational Engineering and Director of the Ken Kennedy Institute for Information Technology at Rice University, who served as *Communications'* EiC for 10 years.

The Publications Board voted unanimously to appoint Simone C.O. Conceição and Anita Samuel, both of the University of Wisconsin, Milwaukee, as the new co-EiCs of ACM's Web-only publication, *eLearn*. Noted as ACM's first online-only magazine, *eLearn's* targeted readership includes both providers and consumers of online learning. Conceição and Samuel's term began July 1 and runs to June 30, 2020.

Computers in Entertainment finished its 14th year with plans for a major reorganization in FY18. The Board approved early plans to combine efforts with ETC Press, the publishing imprint affiliated with the Entertainment Technology Center at Carnegie Mellon, to reimagine the CiE site to better serve this flourishing community. The next steps will be to finalize the editorial plans, create the branding strategy and identify volunteer experts to serve as Editor(s)-in-Chief as well as other main editorial positions. Newton Lee, who has served as CiE's EiC since 2003, has agreed to step down.

XRDS (formerly *Crossroads*), the official ACM magazine for student members, continues to hold the distinction of the only ACM print magazine whose international readership base exceeds its North American audience.

Ubiquity, a Web-based publication dedicated to fostering critical analysis and commentary on issues related to the IT profession, counted over 700,000 downloads in FY17.

VII. ACM Books

ACM Books was launched in 2014 with the mission of filling a void in the computer science publishing world resulting from large-scale consolidation in the publishing sector. This has caused difficulties for important research manuscripts and graduate textbooks, which can no longer find viable publishers.

ACM Books is initially focused on four kinds of books: graduate-level textbooks, deep research monographs that provide an overview of established and emerging fields, practitioner-level professional books, and books devoted to the history and social impact of computing. This publishing program will address the information needs of various members of the computing community, including researchers, practitioners, educators, and students. Our books will also expose the rich history of computing and the substantial global impact this field commands.

Since 2014, we have signed 37 books, and produced 16 of these. At the time of writing this report, there are two books in production with release dates in the next three months. In FY 2017, ACM Books published a total of five new titles and signed contracts to publish an additional six.

In FY 2017, we also undertook two major initiatives. The first was the hiring of a Senior Editor whose job description included assisting ACM Books in acquiring new titles. We have already seen a rise in new signings, and have established a

very effective working relationship between the Editor-in-Chief, the ACM Senior Editor, and our publishing partner, Morgan & Claypool.

The second initiative of FY 2017 was a new book series on Turing Awards. The series will publish a book volume dedicated to each award, celebrating the accomplishments of the winners, explaining the research that led to the award, and discussing the impact of this research. At first go, we are focusing on (a) the winners from 2010 to 2015, and (b) on each new award as it is announced. We have signed contracts for three books, with others coming soon. Each book will be unique, but will have the following common features:

- A biography of the awardee
- The transcript of an interview with the winner(s)
- The Turing Award lecture by the awardee(s)
- The original set of papers that led to the award. Including these papers is aimed at providing focused access to these papers for future generations of researchers and students.
- Chapters written by colleagues that focus on the importance and historical context of the work and the impact it has had. The objective of these chapters is to provide the work in context, explain where the field was before the award-winning work, and what the impact of this work has been on the field.

The challenges for ACM Books moving forward is simple – acquiring and publishing high-quality books. We will continue to do campus visits, and attend conferences to look for opportunities. We will also continue to leverage our area editors to reach to individual communities. Another challenge is to establish a publishing program that serves our practitioner community. We are establishing links to ACM Practitioner Board to assist us in developing relevant projects.

VIII. Other Ongoing Projects

A. Journals Management

New Journals

In FY’17, the three PACM journals were approved. (*POMACS* was approved in FY’16.)

- *PACMPL* was approved on 7/20/2016. On 2/17/2017, the Publications Board voted to make this Gold OA for three years as an experiment.
- *IMWUT* was approved on 7/20/2016
- *PACMHCI* was on approved on 1/12/2017.

The first new type of research and application-focused publication, *Digital Threats*, was approved by the Pubs Board 7/20/2016.

In addition, the *Journal of Human-Robot Interaction* was approved for acquisition on 4/20/2017, and the name was changed to *ACM Transactions on Human-Robot Interaction*. A launch meeting with the co-EiCs and ACM staff took place in 7/7/2017 to work out the next steps (which are underway).

Submissions Statistics

In FY’17, there were 5354 original submissions to 43 journals, and 2522 revisions and resubmissions, for a total of 7,876 submissions. The breakdown is as follows:

Submission System	Original FY'17	Rev/Resub FY'17
S1	5201	2457
EM	153	65
Totals	5354	2522

Journal Promotion

In FY’16, the journals manager and marketing worked closely together to create 21 journal Calls-for-Papers for 15 journals, for both general and special issues, for physical distribution. Twenty-eight eblasts for 18 journals and

Overleaf totaling 558,380 individual emails were also deployed. Of these, 464,081 were delivered and 165,418 (29.6 percent) were opened. Lastly, CfPs for 18 different journals were sent to eight relevant ACM conferences.

Author Services

A number of new partnering relationships were established to improve services for ACM authors. In January 2017, ACM signed an agreement with Overleaf to provide easy access to its LaTeX authoring tool. In March 2017, an SOW was negotiated with the company International Science Editors (ISE) to offer greatly discounted editing services to ACM authors. Also, in March 2017, ACM signed an agreement with Kudos for a five-journal pilot program to offer authors the opportunity to further promote and collect statistics on the usage and citations of their published papers.

Editor-in-Chief Appointments

There were 20 EiC appointments and reappointments in FY'17:

New EiC Appointments FY'17		
Journal	EiC Name	Term
TOS	Sam Noh	8/1/2016-7/31/2019
Digital Threats	Leigh Metcalf/Roy Maxion*	9/1/2016-8/31/2019
TOPLAS	Andrew Meyers	9/1/2016-8/31/2019
IMWUT	Gregory Abowd	11/1/2016-10/31/2019
POMACS	Augustin Chaintreau	11/15/2016-11/14/2019
PACMPL	Philip Wadler	11/15/2016-11/14/2019
TOMPECS	Sem Borst (as co-EiC)	12/15/2016-12/14/2019
TOCT	Venkat Guruswami	2/1/2017-1/31/2020
PACMHCI	Cliff Lampe	2/15/2017-2/14/2020
TOMS	Daniel Kressner	3/1/2017-2/29/2020
TEAC	David Pennock/Ilya Segal	4/1/2017-3/31/2020
TKDD	Jie Tang (interim EiC)	5/15/2017 until new EiC is appointed
JDIQ	Tiziana Catarci	6/1/2017-5/31/2020
TSC	Ken Crowston	6/1/2017-5/31/2020
EiC Reappointments FY'17		
JEA	Gonzalo Navarro	7/1/2016-6/30/2019
TACCESS	Kathy McCoy/Matt Huenerfauth	8/1/2016-7/31/2019
CSUR	Sartaj Sahni	8/31/2016-9/1/2019
TECS	Sandeep Shukla	12/1/2016-11/30/2019
TACO	Koen de Bosschere	5/1/2017-4/30/2020
TOIS	Maarten de Rijke	6/1/2017-5/31/2020
<i>*Roy subsequently resigned and a new EiC search is underway.</i>		

B. International Conference Proceeding Series (ICPS)

The ACM International Conference Proceedings (ICPS) continues to grow at a steady rate. We have seen an increasing number of repeat applications for conferences, which is a good indicator of the satisfaction of the community with the ICPS service. Currently, ACM is evaluating the ICPS business model to ensure the program is (self-)sustainable and, if necessary, will make necessary adjustments ensure that the program continues to thrive.

In addition to the ACM India Council's review of applications from events held in India, Ron Perrott continues to rely on his editorial board to vet applications. In FY 2017, ICPS produced 160 proceedings volumes from 37

countries outside the US. More than 895k DL downloads, roughly 5.1% were attributed to ICPS published articles. In addition to the 160 published volumes an additional 47 were rejected.

C. Hybrid Open Access Program (Journals & Books)

In April 2013, ACM started offering authors the option to make their newly published articles Open Access in the ACM Digital Library by paying an Article Processing Charge (APC). This program was named ACM's Hybrid Open Access program. Since 2013, the program continues to grow and in FY 2017, there were 50 journal and magazine and 419 conference proceedings articles published with paid APCs generating net income of \$381,700, which was rebated to ACM's academic library customers in the form of credits on DL licensing fees.