

1) What do you think are the most important steps ACM should take to reach out to new members and especially younger members? (4)¹

First, I should be clear that what I think are the most important steps probably doesn't matter. We should be listening to new members and younger members to hear what *they* think are important steps. But here are a few ideas:

- Better social media presence, including using ACM as an opportunity to expose our members to each others' social media postings.
- Greater local organization, both to welcome new members (in their own communities) and to organize local get-togethers and activities.
- Building a portfolio of high-impact projects to make the world better (not necessarily our own, but ones that we vet to make sure they are worthwhile and legitimate) to invite our members to have a positive impact on the world through their involvement with ACM.

2) ACM's membership size has been almost stagnant for a decade. What do you plan to do about this? (3)

ACM's membership has been stuck at around 100,000 for some time despite a growing field. There is a core set of long-time members but a large number of people who become members and then fail to renew.

Membership is complicated. There are generational differences. I grew up at a time when membership in organizations was part of identity. That's less true now – certainly less true in North America and Europe, and somewhat worldwide. People build identities from a collection of different activities and involvements, and evaluate membership differently.

ACM has grown. We have many more conferences with more attendees, more journals and other publications, more downloads of our content, more people watching our webinars, and more people volunteering across our activities. But many of these people are non-members.

What could we “do about this?” We could decide that membership isn't bought, it's earned; we could award people members through their engagement with our SIGs, volunteering, attending events, learning online, etc. We could anchor membership to our Code of Ethics, and limit certain activities to “members only,” while making sure such membership is affordable. We could partner to pair ACM membership with membership in local and national societies. We can look at ways to increase the financial value of membership – either by adding new services or by limiting access to some of them to members.

You asked what I would do. I would listen first. My platform (konstan.umn.edu/acm) pledges to convene four task forces that would look at different aspects of this question – professionals in practice, worldwide engagement, the future of conferences and local activities, and we can learn

¹ Numbers in parentheses represent upvotes for each question.

from the successes of others. When we've figured out what we want our future to be, we can understand how membership fits into that future.

3) How might you boost engagement with existing ACM communities or build new and better ones? (2)

ACM has many types of communities. Our Special Interest Groups (SIGs) bring people together by topical interest areas. Most of them host conferences and other events, and many have rich programs including newsletter, awards, and service activities. Our Chapters organize people around geographic areas (and in some cases topical interest) and often hold regular meetings or periodic conferences. We have communities that grow up around our publications, our activities, and other groups (e.g., ACM-W and its regional and local chapters, ACM's technology and public policy council, and others).

First, we need to boost engagement between these communities and ACM centrally. That means a more active ACM leadership, spending more time listening to and learning from those making ACM succeed in these communities. And being better at bringing volunteers from the broader ACM family into ACM's leadership.

Second, we need to help increase engagement of individuals in computing with these ACM communities and make it easier for new communities to flourish. A piece of this improvement involves spending time to rethink the artificial lines we set up (e.g., between chapters, regional councils, topical SIGs) and whether they actually serve our goals. That's an area I plan to convene leaders from all these areas to explore. Within that scope is the challenge of making it easy to quickly create new communities when a need arises, and making it easy to merge or dissolve communities that no longer serve their need. We also need to look at how we support these communities – I plan an assessment of the services ACM provides centrally, from support for membership and events to support for strategic planning and volunteer development to support for marketing and communications. We need to provide the best possible support to our communities because when they thrive, ACM fulfills its mission.

4) What are the concrete steps that you would take to further expand geographic diversity and deepen the participation of more countries in ACM?

I want to hear from members and potential members in these countries first, so step one is to convene a task force to look at ACM's future as a global society.

I want to recognize where we've been successful, and acknowledge where we have not been.

ACM has broadly grown the diversity of conference venues around the world (through a concerted effort to do so) and has broadened membership on editorial boards extensively (also through a concerted effort).

At the same time, the geographic diversity of ACM's leadership is weak. Our models of operating around the world are very American. We lack meaningful staff support in many regions, and too often we schedule and run things on an American or at best American+Western European calendar and clock. And our membership offerings are very American-focused and English language-focused.

I believe that part of our solution is to explore deeper partnerships with local organizations. We have a lot to offer. ACM has substantial worldwide reach and strength in publications, operations, and much more. But the local organizations have their own strengths, including knowing how to make things successful in their own context. Such partnerships won't be welcome everywhere, but that's one thing to explore.

More broadly, we need to explore what computing professionals around the world want that they aren't already getting from their existing memberships. And we need to understand what we can offer now, and what we would have to change to be able to offer. These aren't easy questions, but they are important ones to take on.

5) What do you see as the main benefits of ACM membership? (2)

For me personally, ACM membership is a part of who I am. It is ACM that offers me the chance to do things professionally important to me, from running conferences to contributing to the field in many ways. I am a life member of ACM because I cannot imagine being otherwise.

But I realize that others will view ACM membership differently. Some will primarily value publications, but those will all be open to the world before long. Others will value discounts for conferences. Yet others will value the educational resources, webinars, and other content.

But I hope more people value being part of – indeed a critical part of – an organization that does all of these things for the field. That being a member, exercising your right to vote, and being engaged and active are ways of giving back to the field and shaping it for tomorrow.

6) How will you make ACM more responsive to the needs of members and volunteers? (3)

(answering 6 and 7 together)

7) Last year Moshe Vardi raised, in a CACM column on "The Agency Trilemma and ACM", the issue of the working relationship between ACM members, elected officers, and ACM HQ staff. How do you plan to ensure that ACM is membership driven? (1)

It starts with demanding more of the elected officers and the ACM Council. Part of the "trilemma" comes when elected leadership doesn't lead and leaves it to staff to run the organization. I've worked with our staff for a long time. They're good people and they're motivated to see ACM succeed. When leadership hasn't led, staff stepped in to take on what needed to be done.

ACM has survived, but it didn't necessarily do what members would have chosen. So step 1 is to demand more from leadership – more frequent meetings, deep dives into key topics, actually understanding the budgets and policies being voted on, leadership development, and more.

Second, we need to audit the quality and structure of our operations. We need to assess the service we provide to members (supporting conference volunteers, SIG leaders, editors, authors, reviewers, etc.). To evaluate our external-facing services, our marketing, web, social media, etc. And to review the structure of our leadership and staff – the structure has changed little in more than 20 years as the organization has grown and diversified.

Third, we need to bring more members into the planning process. We need task forces with diverse membership to look at issues from internationalization to conferences to membership. It is hard to be membership driven when you don't hear from members, so we need to invite the membership into focused discussions.

Finally, we need to implement accountability measures, including performance metrics for senior staff leaders.

This cannot be finished in one term. That's why I will charge a task force on governance to see how we can provide future ACM Presidents with both more time to plan their terms of office and greater continuity (I favor electing a President-Elect two years ahead, but there are other good alternatives as well).

8) Do you have any plans to help authors benefit from their published papers? For example, giving a percentage of the money ACM makes per download to the authors (22) (Note: This was the most voted for question by a wide margin.)

I don't agree with the premise of this question. I believe that authors already benefit substantially from their published papers (in their careers, in retaining patent rights should they wish to practice what they've invented, and in the wide dissemination of their work). Authors choose to publish (and indeed in many cases are expected or encouraged to publish) because they want their work to have a wide reach, and it is ACM's job in its role as a publisher to help authors reach as wide an audience as possible.

I'm a believer in sustainable open access – in making downloading papers free to readers, and in shifting the costs of publication to those who funded the research. The ACM Open model is a good one, and we have found many universities and companies eager to move towards subscribing to “making our content open to the world” rather than subscribing to read closed content.

ACM is also committed to making its publications finances open (you can find a report on them annually in CACM). I've worked with other ACM leaders and staff to show where the money comes from and where it goes. There isn't some secret pool of profits – some funds go back to

sustain the communities that generate content (primarily the SIGs) while most of the revenue funds the operations of publications and the ACM Digital Library.

You didn't ask about reviewers, but it is only fair to discuss them here. Right now reviewers put in substantial volunteer effort without corresponding benefits. I do support looking at ways to better support and reward reviewers for the contributions they make to publications, including some of the experiments we've run offering incentives to committed high-quality reviewers.

9) The ACM increasingly resembles a predatory publisher, abusing unpaid reviewers and editors while charging outrageous open access fees to host PDFs badly. How will you reduce OA fees while offering fair compensation for academic labour?

I disagree with your characterization of ACM's publications model and program, though I agree that there are areas where we can improve.

Publication is not "hosting PDFs" – indeed, the ACM DL has shifted away from PDFs as the primary way to disseminate papers to instead use a more accessible and mobile-friendly format. But ACM's commitment is to make content available forever (something that unfortunately many pop-up discount publishers neglected, with their resulting publications no longer available anywhere). We also protect authors and readers, reviewing scores of ethics complaints each year (from plagiarism to failure to credit authors to outright fraud to biased reviewing).

ACM's publications finances are published annually (something I'm proud to have done in my role as co-Chair of ACM's Publications Board), and while there are always things that can be improved, I feel our problem is more often not investing enough rather than spending too much. You will also see that ACM's publications fees – whether OA fees or subscription fees – are lower than most of our peers including our non-profit peers. I support ACM's transition to full open access based on institutional subscriptions (and the backup of OA fees for authors). And I support a commitment (compliant with Plan S) for transparency in publication costs and fees.

That said, I think the question of whether volunteer editors and reviewers is the right model is a legitimate one. While I'm not against systems where author submission fees pay in part for reviewing, I do worry that paid reviewing moves quickly away from true peer review. I think it is worth exploring models where authors are required to do a certain amount of reviewing in exchange for getting their own papers reviewed. But all models run into the problem that the best reviewers are always in great demand.

10) In June 2020, ACM Council adopted the goal of making the Digital Library fully Gold Open Access within five years (subject to Covid and sustainability). What will you do to make this happen? (1)

I brought the OA transition goal to the ACM Council and have been working before and since to help deliver on it. I'm delighted to report that we're pretty much on track so far. Our staff has signed up many top institutions, and has deals in place or pending with several consortia and entire countries. We were slowed down by COVID (right now we're about 6 months behind), but I believe we can pick up momentum going forward.

First, we need to communicate about ACM Open to the computing community. Institutions join ACM Open because they are committed to OA and because they hear from their faculty and students in computing that they support it. I want to invest in ACM's communications team and to be much more active in reaching out to the computing community worldwide.

Second, we need to carefully monitor our progress. The ACM Executive Committee hears reports every six months – if progress is slowing down we need to either invest more in outreach/sales or explore model changes that will make the transition smoother (one of the brilliant steps taken by our Publications team was offering ramp-up contracts to institutions that wanted to commit, but could not afford to do so immediately).

Third, we need to retain and attract authors from lower-income countries. We've done deals to provide free DL access and free OA authorship to authors from 25 countries. We need to switch to Gold OA without sacrificing openness to authors.

Finally, we need to be realistic about when we can afford to “flip” to full OA. We know some institutions will only change when we announce the flip, and that we can flip at well below 100% adoption – we'll continue running models to make that flip as early as possible.

11) How will you fix the systemic problems with the ACM Digital Library? What do you see as the most pressing problems? (2)

The ACM Digital Library was an incredible innovation, but it has serious problems that undermine its value even as the quality of the collection increases. The most pressing problems include: (a) search – it is particularly bad when searching for authors and venues, but fairly bad overall; (b) representation of conferences – proceedings in the DL are still harder to navigate and don't represent the full contents; (c) artifacts – the difficulty in finding video, code, and other rich content; (d) metadata – too hard to learn or search by type of content or review (what if I want to find peer-reviewed full papers, not posters or panel abstracts); (e) general user interface. Behind the scenes are other problems, including far too many cases where user or institution identities are not handled correctly. The list goes on from there.

But more generally, the problem was a dated code base, but now that we've migrated to a commercial DL platform I feel the problem is the lack of solid investment in and prioritization of the user experience. And frankly too much pursuing the new nifty feature over making the essentials work well.

We've started this effort (we launched both a new DL department and a new DL Board last July), and we need to give them some time to organize. But what's clear is that we need the board to set clear priorities, we need to invest in getting those done, and we need to hold the DL Director accountable for those priorities. There has been substantial progress in logging and tracking bugs and feature issues. They are moving to an agile development paradigm which seems very appropriate. So my main step would be to support and monitor this effort, and to ensure that the user community's voice is making it into the priority list.

12) COVID has opened new opportunities for virtual conferences. How do you see the future of ACM conferences? virtual, in person, hybrid? and how might the pricing model change? (2)

This is an important question, and one that our special interest groups (and others who organize conferences) are struggling with right now. My plan is to bring together local and topical conference organizers to explore the future of ACM's conferences and meetings. But I'm happy to share a few of my own observations.

We gained a great deal during the pandemic. We learned that there is a lot we can do effectively remotely. And that virtual conferences reduce the barriers to participation substantially – many set records for attendance with much of the increase coming from people who could not have afforded to attend in person. There is no simply going back to the way it was before – the gains in sustainability and access are here to stay.

At the same time, we missed a lot of what made conferences so valuable. The informal time, the unplanned interactions, the networking, and the depth of focus and immersion did not translate as well in the virtual events.

Hybrids have merit, but they also have some of the worst of both. They are too expensive and take away from both experiences.

I expect we're going to see a major transformation. Some conferences will become fully virtual, but not in the formats we've had before. They may span a month or more of sessions and have large asynchronous components. And they will probably be inexpensive. Some communities will have one large in-person event every year or two – a major networking conference, maybe without the stage-based content (which can be more easily delivered virtually) but with more poster sessions, demos, and other experiences. We may see locally-federated conferences with gatherings in many communities sharing some virtual content while having some local sessions.

I don't know what's next, but I know it will be exciting.

13) Do you think the surveillance capitalism model currently practiced by many large tech companies violates the ACM Code of Ethics? If no, why not? and if yes, what might you change about ACM's relationships? (2)

This is an important question, and I'm honestly not sure. I also don't think this is primarily about what I believe. As someone brought up in the US, I've grown into the belief that most uses of data are OK if they are disclosed and consented to. If I were brought up in Europe, I expect I'd have a much higher threshold for disclosure and consent. If I were brought up in East Asia, I might have a different perspective that gave more weight to the rights of people collectively as compared with that of the individual. How ACM manages policy needs to be informed by many perspectives which is why I would be very glad to depend on the expertise of ACM's Technology Policy Council and our own Committee on Professional Ethics.

I should note that ACM's Code of Ethics applies to computing professionals – each statement there starts with “a computing professional should ...” A model of surveillance capitalism cannot violate that code – only the computing professionals who take place in designing, implementing, or otherwise facilitating that model can. ACM members can be sanctioned for such violations, and members have been in the past.

If we were to find that a company was coercing its computing professionals to violate the ACM Code of Ethics, particularly ACM member employees, I think it would be appropriate to intercede. If ineffective, one remedy would be dissociating from the company (refusing sponsorships, naming opportunities, institutional memberships, etc.). But even there, I would hope we would continue to support the individuals employed there in the hopes of empowering them to act ethically.

14) The world as it is today faces tremendous problems, many of which pose existential threats. Addressing the problems caused by climate change may be the most obvious, but there are many others. What are your thoughts on the computing profession's responsibility to society at large in relation to these problems and what specific steps would you propose that ACM should take in relation to them?

It is all of our responsibility to make the world a better place, and the computing profession and ACM are certainly not exempt.

First we must recognize our unique responsibility in areas where we are actively contributing to the world's problems. Whether it is the carbon footprint of our conferences, the immense carbon footprint of cryptocurrency mining, or the use of digital surveillance to oppress and suppress people, we have an ethical responsibility to raise the issue and contribute towards solutions. That may be carbon offsets for conferences but also greater videoconferencing. It may be a report on the carbon impacts of cryptocurrencies, but perhaps also new computational methods that provide the benefits of such currencies without the carbon costs. It may be raising awareness of the risks of digital surveillance but also tools to empower individuals to communicate outside that surveillance or to expose its harmful uses. ACM can implement some of these solutions internally and promote others externally.

But we also have a collective responsibility to contribute to addressing problems not exacerbated by our own field. To help lessen the achievement gaps between students of different background or the health outcome gaps across race, ethnicity, and wealth. To help fight against disinformation or fight against ethnic cleansing and multigenerational war. Here, ACM can help our members organize around a few key efforts. We can promote opportunities, provide the background information and support, and recognize the contributions made by our members (and others in the field who join them).

15) How will you navigate the divide between those who are thriving within the existing ACM community and those who demand large, structural changes toward diversity, equity, and inclusion? (2)

There will always be people who thrive in the status quo and people who seek change. If this were a general question, I would say that it is important to preserve elements of the status quo, even in niches, while also supporting new initiatives and structures that allow progress towards the future.

But this isn't a general question. It is asking specifically about people who thrive as compared with those who seek diversity, equity, and inclusion.

First, I'm very glad that a large number of people who seek structural change are people who are thriving under the status quo. Equity is not the sole responsibility of the disempowered. Diversity is not the sole responsibility of the minority. Inclusion is not the sole responsibility of the excluded. It is precisely the thriving who should devote energy to making it so that all can thrive.

Beyond that, I have no tolerance for those who would perpetuate sexism, racism, ableism, or any other -ism in our field and our society. Structural change towards DEI should not exclude those who were in the majority before, but it does mean they will have more company and more competition. I hope I can help bring some of those who see this as a "divide" around to embracing inclusion for all of us. But if not, I stand solidly with inclusion.

16) How would your values and professional experience contribute to the ACM's efforts to create a more diverse, equitable, and inclusive environment for members? What specific initiatives or organizational changes would you pursue towards that end?

I am in my 30th year as a professor of computer science at a public university (the University of Minnesota), and I have been volunteering for ACM for almost all of that time. I believe in education, and particularly in an accessible, inclusive, and diverse education. You can read more about my general background on my website, but let me address some experiences and values related to diversity, equity, and inclusion here.

As part of my leadership in the University of Minnesota Faculty Senate I was able to help achieve several key equity and inclusion advances. I spent several years working to improve parental leave – prior policy was weak and too often placed the burden of finding replacements on new parents. We crafted a policy to address all new parents. I also spent two years work on policies and programs to prevent sexual misconduct (eventually persuading the Senate to pass major policy changes including mandatory training). And more recently spent two more years working to help craft and shepherd a policy on gender identity rights including access to facilities, use of preferred names and pronouns, and more.

Within ACM, I most recently worked with transgender authors and others to help develop and pass a field-leading policy on author name changes. Over the past three years we've moved from an initial proposal to an implemented policy and procedure that has implemented the policy. Others are now looking at adopting it.

Finally, in the past three years I've been in a role where I've had the opportunity to support students, scholars, and faculty from China in the face of threats around visa revocations, travel bans, and federal investigations. I've seen firsthand how good people can come under attack for reasons of nothing but nationality.

17) ACM has becoming increasingly interdisciplinary with more scholars from the humanities and the social sciences. What is your take on this evolution? (2)

I think it is a reflection of computing becoming more interdisciplinary, and it is a good thing. There's nothing wrong with computer science for its own sake. I think there will always be a need for people who work on the internals of computer systems to get greater performance, robustness, etc., without being motivated by outside influences. But that inward looking computer science would need a companion discipline that looks at its application to the world's problems.

There is much to be gained from incorporating the companion discipline (or at least a chunk of it) in our own society and in our embrace of computing. By having these two together, we're better able to take on challenging problems that engage people (hence the social scientists and humanists) but also natural phenomena (and scientists) and other engineering fields.

Take quantum computing, for instance. We could not take on quantum computing without bringing together physicists, mathematicians, engineers, but also people with a core training in computer science. In an ideal collaboration, these folks can all work together to co-craft programming abstractions, algorithms, systems, and underlying materials to match specific shapes of reliability to specific hard-to-solve problems.

Or take my own field of human-computer interaction. I was trained first in building event-driven graphics systems to implement user interfaces. But it was only when my work came together with that of psychologists, other social scientists, and designers was I able to transition from what I was able to build to what I should build.

So my take is very positive.

18) How do you see the mix of required computing skills changing over time (e.g. less programming/coding)? What would you do to prepare ACM for the changes that you expect/forecast will come?

What is wonderful about computing is that it has become a fundamental part of almost every field and trade. Yes, the tools have become higher level (it is certainly easier to do a wide range of things with Python and its libraries than it was in Fortran or COBOL), but the breadth of people practicing means that many computing professionals also have training in other things, from statistics to health sciences to architecture and more.

ACM has been reacting to these changes consistently for the past decade (and longer). Our education board has long since moved beyond a single “computer science” curriculum to a suite of curricula including data science, cybersecurity, and IT. Our publications are more interdisciplinary and often cross research and practice in areas such as computer games, digital government, and the like.

But in some ways curricula and publications are the easy part. More challenging is how to engage and support professionals who have a different relationship with computing. Can we provide the continuing education, the knowledge of best practices, the professional networks and support to people who are health data scientists? computer-aided architects? small business automation experts?

I don’t have answers here, but I suspect that a big part of the answer lies in being nimble in the creation and support of specialty groups – local and non-local. How can we be responsive and provide a quick solution to people interested in creating an interest group? Can we make it low-effort and high-reach so they are more effective with ACM than they could be without us?

19) The leadership of other ACM SIGs has taken public positions on issues like the war in Ukraine and the black lives matter movement. Do you think it is appropriate for SIGCSE to take public positions on issues not directly related to Computer Science Education, with or without polling its members?

I am not aware of specific public positions taken by SIGCSE (or being considered by SIGCSE), but I am happy to comment more generally on what is appropriate for leaders of SIGs and others in positions of responsibility within the organization.

In general, elected leaders should address the issues of concern to their membership, and they are accountable to their membership. To use SIGCSE as an example, it is clearly appropriate for them to take public positions related to Computer Science Education. But there are also many issues that affect SIGCSE members beyond CS Education. As an example, it would be

appropriate for SIGCSE to take a position on, or set policy on, the accessibility of its conferences. It might publicly state that it will not hold a conference in a facility that lacks adequate accessibility for both attendees and presenters. Similarly, it could decide that it will not hold a conference in a country that places excessive limitations on visas such that much of SIGCSE's membership could not attend. It can take public positions about other factors that affect CS Education – including about how racism or war are detrimental to the learning of students. SIGCSE could offer its support to victims of a natural disaster, or victims of a war, even when the suffering is not specific to CS Education.

I think ACM and all its units should be careful when taking political positions. We are not experts in that domain, and often it is hard for us to have all of the facts at hand. But in the end the accountability for taking positions lies with the membership, and SIGCSE leaders will know whether they've done right when they hear from the members they've been elected to represent.

20) Several colleagues in the community express concerns about research rankings of programs, metrics of research productivity for individual researchers, and other related criteria. To what extent do you believe the current criteria fairly reflect the quality of research conducted and how might these criteria/metrics be improved?

I'm not an expert in program rankings, especially the variety of such ranking systems used around the world. But the aspects of program rankings I do know have some serious problems. In the US, all too often programs are ranked on research funding (or research expenditures) which are fundamentally a measure of input, not output. One result is that wealthier institutions (many of them private) get more "credit" for the same work as poorer institutions (many of them public) simply because they are more expensive. Another challenge comes from using poor surrogate measures for the quality of research (either counting publications or counting properties of the venues – such as impact factors or official tiers of publications – rather than looking at the actual contribution of the research itself). And the use of surveys tends to slow down recognition of high-quality emerging programs (or the decay of historically strong ones).

That said, I'm not suggesting that we can solve the challenge by avoiding assessment or even some form of rankings (though I'd prefer to avoid fine-grained rankings). I'm much more supportive of criteria-based evaluation based on thorough evaluation of individuals or programs.