SGB Annual Report 1-July-2023 through 30-June-2024 Submitted by: Jens Palsberg, Chair

The SIG Governing Board (SGB)

The SGB is comprised of the chief executive officer or designee of each regular SIG. The SGB is charged with forming SIGs, with managing them and setting policies for their management, and with recommending their dissolution. The SGB elects a Chair, Executive Committee and 3 additional representatives to Council.

The SGB EC

The SGB elects a Chair and an Executive Committee, which has full authority to act on behalf of the SGB between its meetings. The SGB EC is bound by the SGB's actions and the SGB may override any decision of the SGB EC. The SGB EC is made up of the following positions which were approved following the review and approval of the restructuring task force recommendations:

SGB Chair - Serves as SGB EC Chair, one of the four SIG Representatives on ACM Council, and as the SIG Representative on the ACM Executive Committee. Also responsible for SIG financial and budgetary issues and overseeing SGB committees and task forces.

SGB EC Vice Chair for Operations – Presides over SGB and SGB EC Meetings, including SGB EC conference calls. Oversees SIG Liaisons to ACM Committees and Boards.

SIG Development Advisor –. Identifies emerging technical areas and works with individuals and groups interested in forming SIGs.

SGB Conference Advisor – Oversees developing conference activity to be sponsored by the SGB.

New SIG Advisor – Acts as liaison for newly chartered SIGs and helps to nurture and support new SIG leadership as they develop programs and activities.

SIG Viability Advisor – Oversees transitional SIGs and works with SIGS scheduled for program reviews. Also acts as the SIG election liaison.

SIG Awards Advisor -. Acts as liaison for SIG leaders and Awards Committee and helps SIG leadership with proposals and approval process.

Publications Advisor – Acts as liaison between SGB and Publications Board and oversees issues related to publications as directed by the SGB.

SGB Past Chair- Provides guidance and advice to the SGB EC and chairs the SGB EC nominating committee.

Director of SIG Services – Staff liaison

During FY'24 the following individuals held the positions indicated:

<u>Position</u>	Term End
Chair	June 30, 2024
Past Chair	June 30, 2024
SIG Viability Advisor	June 30, 2025
SIG Development Advisor	June 30, 2024
Conference Advisor	June 30, 2025
Vice Chair for Operations	June 30, 2025
SIG Awards Advisor	June 30, 2024
New SIG Advisor	June 30, 2024
Publications Advisor	June 30, 2026
Staff Liaison	
	Chair Past Chair SIG Viability Advisor SIG Development Advisor Conference Advisor Vice Chair for Operations SIG Awards Advisor New SIG Advisor Publications Advisor

Council Representatives

The SGB elects 3 representatives to the ACM council for two-year terms. During FY'24 the following individuals held the ACM Council positions indicated:

<u>Name</u>	<u>Position</u>	Term End
Jeanna Matthews	SGB Council Representative	June 30, 2024
Vivek Sarkar	SGB Council Representative	June 30, 2025
Thomas Zimmermann	SGB Council Representative	June 30, 2025

Standing Committees

The SGB EC oversees The Federated Computing Research Conference (FCRC). Timothy Pinkston was the FCRC'23 Chair and is now the Steering Committee Chair. The next in the series is scheduled for 2027.

FCRC assembles a spectrum of affiliated research conferences and workshops into a week-long, co-located, meeting. This model retains the advantages of the smaller conferences, while at the same time facilitating communication among researchers in different fields of computer science and engineering. Each morning FCRC features a joint plenary talk on topics of broad appeal to the computing research community.

The technical program for each affiliated conference is independently administered, and each is responsible for its own meeting's structure, content, and proceedings. To the extent facilities allow, attendees are free to attend technical sessions of other affiliated conferences co-located with their "home" conference.

Actions of the SGB

SIGAda was merged into SIGPLAN bringing the SIG count to 37. The SIG is now a Committee of SIGPLAN. The leadership will continue to hold the HILT workshop as a sponsored event of SIGPLAN and issue a newsletter, also as part of SIGPLAN.

SGB Meetings

SGB meetings were held in person on 11/3/23 and 4/12/24.

Emerging Interest Groups

The Emerging Interest Group on Reproducibility and Independent Verification remains active.

Miscellaneous Appointments

SIG leaders appointed as committee liaisons:

<u>Name</u>	<u>Position</u>	Term End
Jonathan Aldrich	Publications Board Liaison	June 30, 2026
Timothy Pinkston	FCRC Steering Comm. Chair	June 30, 2027
Kim Tracy	History Committee Liaison	June 30, 2026
Jeanna Matthews	ACM Technology Policy Council	June 30, 2025
Michel Beaudouin-Lafon	ACM Technology Policy Council	June 30, 2025

SGB Nominating Committee

The SGB Nominating Committee nominates candidates for the SGB EC, in addition to nominating candidates for SGB Chair and SGB Representatives to ACM Council. Jeff Jortner as Past Chair of the SGB EC was the Nominations Chair. Jeanna Matthews and Shan Lu were members of the committee. Donna Cappo was the ACM HQ liaison.

SIG Membership

Appendix A summarizes basic SIG Statistics for FY'24. Included are member and subscriber totals and conference activities.

Membership Counts by class of membership:

	<u>FY'24</u>
ACM/SIG Members	28,475
SIG Only Members	4,562
Subscribers	352
Total SIG Members/Subs	33,389
Total ACM Members	103,772

The SIGs overall member/subscriber count is 33,389 as compared to 33,536 in FY'23.

SIG Program Reviews and Annual Reports

Program Reviews and annual reports are the reporting mechanism for individual SIGs to the SGB.

Program Reviews

No Program Reviews were held in FY'24.

Annual Reports

Annual reports were received by the submission deadline from: SIGACCESS, SIGAda, SIGAPP, SIGARCH, SIGCAS, SIGCHI, SIGCSE, SIGECOM, SIGEVO, SIGHPC, SIGMETRICS, SIGSIM, SIGUCCS, and SIGWEB. These reports can be found in Appendix D.

Annual reports were received following the submission deadline from: SIGAI, SIGBED, SIGCOMM, SIGDOC, SIGEnergy, SIGGRAPH, SIGMICRO, SIGMIS, SIGMM, SIGMOD, SIGOPS, SIGPLAN, SIGSAC, SIGSOFT, and SIGSPATIAL These reports have been added to Appendix D.

Annual reports were not received from: SIGACT, SIGBio, SIGDA, SIGIR, SIGITE, SIGKDD, SIGLOG, SIGMOBILE and SIGSAM. This will be noted in their viability reviews.

Highlights from Appendix D – SIG Annual Reports

Diversity, Equity, and Inclusion

To Increase Diversity and Equity of SIGAPP Officers and Organizing Committee members and to foster a sense of community among SIGAPP Officers and Organizing Committee members, SIGAPP tried to recruit volunteers without discrimination against various races and countries. As a result of these efforts, compared to 20~30 years ago where authors of SAC mainly from EU, and USA, we have lots of authors from Asian

and African countries now. SIGAPP has also reorganized the Steering Committee of ACM SAC 2025, its flagship conference, to comply with ACM policies on diversity, equality, and inclusion, following the decision made in business meetings during ACM RACS 2023 and ACM SAC 2024.

SIGMICRO eliminated the membership fee for students and reduced it to only \$5 for professional members, to enable better accessibility to a diverse community and include students and more and more diverse members as much as possible.

The SIGCSE Board now requires a DEIA Chair for all six conferences. We also have a board liaison position and a member on the ACM Diversity, Equity and Inclusion Council. Two new conferences were added to our activities, a Virtual conference, to enable participation for members who for any reason (cost, visa issues, university policies etc.) are unable to travel and the RESPECT conference (Conference for Research on Equitable and Sustained Participation in Engineering, Computing, and Technology) which has an aim of providing the premier venue for research on equity, inclusion and justice in computing and computing education.

SIGMICRO sponsors and supports the Career Workshop for Inclusion and Diversity in Computer Architecture (https://www.colorado.edu/conference/cwwmca/), which will celebrate its 10th incarnation in 2024 at the MICRO Conference. The MICRO CWIDCA Workshop (formerly CWWMCA) brings together diverse members of the computer architecture community at different levels in academia, industry, research, government, and students to promote the recruitment, retention, and progression of women and underrepresented groups with research interests in computer architecture. The workshop highlights emerging and hot topics in computer architecture, but also provides opportunities for cross-disciplinary research, networking, and career advice and mentoring. The workshop contains a mix of technical presentations and panel sessions given by academic and industry leaders as well as informal activities to provide mentoring for students as they get started in their careers. SIGMICRO provided travel grant support for \$15,000 for the CWIDCA workshop.

SIGSOFT has a dedicated travel support and conference attendance program called CAPS for members of underrepresented groups, students, or anyone who cannot afford the registration fees of a conference.

WiGRAPH, an ACM SIGGRAPH Affinity Group for Women in Computer Graphics Research, aims to increase the number of women pursuing cutting-edge research in computer graphics. The program specifically supports this community, welcoming all women (cis and trans) who are either established researchers or interested in exploring the path to becoming researchers in computer graphics. Launched in 2022, their Rising Stars in Computer Graphics program is designed to encourage people of underrepresented genders to become research leaders in computer graphics. This is a two-year program tailored for researchers who expect to be on the job market within the next two years. Announced in May, 2024, ten up-and-coming researchers selected to participate in WiGRAPH's Rising Stars program, a two-year program of mentorship and workshops co-located with SIGGRAPH 2024 and 2025.

Awards

The ACM SIGAI Autonomous Agents Research Award is presented for excellence in research in the area of autonomous agents. The recipient is invited to give a talk at the International Conference on Autonomous Agents and Multiagent Systems (AAMAS). The 2024 ACM SIGAI Autonomous Agents Research Award was presented at AAMAS 2024 in Auckland, New Zealand to Professor Catholijn Jonker, professor of Interactive Intelligence at the Faculty of Electrical Engineering, Mathematics, and Computer Science of the Delft University of Technology. Professor Jonker is a leader in the field of human-machine interaction, in particular regarding modeling the cognitive processes and concepts involved in negotiation and teamwork. Professor Jonker initiated the Automated Negotiating Agents Competition at AAMAS and IJCAI. She has also contributed to other research domains such as integrating interactive intelligence for hybrid intelligent systems. She is also very active in advancing research into value-sensitive and responsible AI. She is very much involved in promoting women in academic positions. She chaired the Network of Female Professors. She is a role model for many young

researchers. Her research is highly visible and praised. Professor Jonker received numerous awards. She was the past President of IFAAMAS.

The SIGCHI awards for 2024 increased in number this year with the Awards Committee generously and enthusiastically recognizing more nominees than in the past, in particular to align with the rate at which the community is growing. This is the first year that saw four Lifetime Research Awardees (typically there is one), ten Academy inductees (exceeding the prior cap of eight), and five Outstanding Dissertation Awardees (up from three in prior years). Discussions have been underway regarding new awards that might be introduced. You can find the names and affiliations of the awardees below and more information about them on our blog. The SIGCHI EC is currently organizing a series of **Awards Talks**—Zoom sessions where SIGCHI members are invited to listen to the awardees talk about their accomplishments and engage with them live. These Zoom recordings will be made available on SIGCHI's YouTube channel. Although we started with the 2024 awardees, we have opened up this opportunity to prior awardees as well.

The SIGCSE Distinguished Service to the Computer Science Education Community went to Chris Stephenson, USA, for "outstanding lifelong service to K-16+ computing education, making indelible contributions to support computer science educators, establishing computing education standards, and developing computing curricula that will continue to impact generations of children to come." Chris gave a keynote address at the First-timers lunch, Technical Symposium in Portland in March 2024 titled "Tales from the Trenches: Using What We've Learned to Move CS Education Forward".

SIGEVO - The Humies are a special type of award that is associated with human-competitive applications of evolutionary computation methods. Entries must pertain to publications that appeared in the last year and must adhere to various eligibility criteria. A panel of five independent judges is responsible for the selection of cash prize winners (Bronze, Silver, and Gold) for what comprises in total \$10,000. The prize money is donated by Third Millennium Online Products Inc. There were 16 eligible entries this year, of which 8 were selected as finalists. The finalists presented their entries during GECCO in front of the judges and other interested GECCO attendees. As the Humies are considered to be important for our field, a non-parallel session slot was used for this at GECCO, making it possible for all GECCO attendees to be present. Two bronze awards were given out this year, one silver award, and one gold award.

SIGDOC's Diana Award, given every other year (or so); the award is named after Diana Patterson, past President of SIGDOC for three terms (1980–89). The award is given to an organization, institution, or business for their long-term contribution to the field of communication design. This year's winner was EuroSIGDOC. EuroSIGDOC, ACM SIGDOC's European Chapter, consists of a group of researchers and practitioners wanting to pursue the SIGDOC mission in a European context. Like SIGDOC, EuroSIGDOC focuses on the design of communication as it is taught, practiced, researched, and conceptualized in various fields, including technical communication, software engineering, information architecture, and usability.

Significant Papers and Publications

SIGHPC - The Gordon Bell committee created a new award, the ACMGordon Bell Prize for Climate Modelling. This prize was awarded for the first time at SC23. The winning paper was: The Simple Cloud-Resolving E3SM Atmosphere Model Running on the Frontier Exascale System. (https://dl.acm.org/doi/10.1145/3581784.3627044)

The 2024 ACM SIGMETRICS Best Paper Award was a tie. Two papers were chosen: (i) "Agents of Autonomy: A Systematic Study of Robotics on Modern Hardware" by Mohammad Bakhshalipour, Phillip

B. Gibbons (Carnegie Mellon University), and (ii) "Strongly Tail-Optimal Scheduling in the Light-Tailed M/G/1" by George Yu, Ziv Scully (Cornell University).

SIGACCESS - The **ASSETS 2023 Best Student Paper** was awarded to Humphrey Curtis (King's College London) and Timothy Neate (King's College London), for their work "Watch Your Language: Using Smartwatches to Support Communication." In this paper, the authors address the need for scalable high-tech augmentative and alternative communication (AAC) apps by designing and evaluating two discreet AAC smartwatch apps. AAC applications are used by individuals who have difficulty speaking or composing language for communication. Using participatory design techniques, they collaborated with a community of people living with aphasia to develop a smartwatch app for public communication, "Watch Out," and one for private cognitive support, "Watch In." The researchers then evaluated these apps through an experience prototyping workshop and focus group, finding that participants successfully used both apps without restricting their agency and non-verbal communication.

International Activities

Encouraged by the success in Southeast Asia, SIGCOMM has now turned its attention to increasing engagement with the African continent. Collaborating with partners from the Internet Society, CMU Rwanda, and the University of Cape Town, the SIG plans to offer remote viewing opportunities for African students to follow the upcoming Internet Measurement Conference (IMC) in Madrid. Additionally, a number of geo-diversity travel grants will be dedicated to supporting African students who wish to present posters at the conference. Looking further ahead, SIGCOMM 2025, which will be held in Portugal, will replicate the Southeast Asian model, this time focusing on Africa. The SIG is also working with its African partners to establish a regional event that can serve as a hub for the African networking research community, much like AINTEC has done for Southeast Asia.

SIGPLAN-M organizes an international long-term mentoring program for programming languages researchers. The goal of the program is to address two mentoring needs in the programming languages community. First, for aspiring or junior researchers, it is difficult (but necessary) to form long-term connections in the programming languages community, and to access the perspectives of researchers from other institutions. Second, for senior researchers, it is difficult to access mentorship of any kind. The program has been a tremendous success and is highly valued by the community. Indeed, Talia Ringer won the 2023 SIGPLAN Distinguished Service Award in part for her development of SIGPLAN-M.

SIGSIM sponsored the NASA Simulation Exploration Experience (SEE), an international student-driven event on distributed simulation for space simulation.

Collaboration

SIGARCH In collaboration with TCCA, and under Martha Kim's leadership we have outlined, created and maintained "packets" for Program Chairs and General Chairs, best practices for conference reviewing and best practices for program chairs (with Boris and José collaborating with Daniel Jiménez and Moin Qureshi of TCCA). Martha has also created and maintained a document outlining guidelines for SIGARCH sponsored conferences that include high standards for review processes, well-articulated processes for the creation and maintenance of a steering committee and a commitment to diversity and inclusion from organizers.

SIGBED started a new initiative in 2022, called SIGBED Cross-SIGs Activities. It aims to collaborate with closely related ACM SIGs to organize events that will benefit the members of SIGBEDs and other SIGs. In this way, we promote interdisciplinary collaborations, knowledge sharing and transfer, and spark new ideas.

In addition to the new regional efforts, SIGCOMM will continue to support established collaborations and initiatives, such as the TMA PhD School, N2Women, and COMSNETS. The N2Women workshop, held in person at SIGCOMM 2023, featured a keynote by Professor Tanzeem Choudhury of Cornell Tech,

reflecting on diversity, equity, and inclusion in computing, as well as talks by female students and a panel of renowned female researchers in networking. SIGCOMM kept up its efforts to support the well-being and education of students around the globe. In collaboration with the EU's EMPOWER initiative, and the NSF PAWR Project Office, the SIG continued toco-operate The Networking Channel (https://networkingchannel.eu/), an online talk series centered around the networking research and education communities. The channel was launched in March 2021 and has already gained a strong and consistent following, with hundreds of participants every other week. The channel has diverse representation, with participants from all continents, from a broad spectrum of university types (R1/R2, teaching universities, etc.). The talks are interactive, taking live questions and encouraging participation from the community. Topics range from next-generation networking technologies, to how to succeed in graduate school (the latter had over 800 registrants) to how to improve diversity and inclusion in the systems and networking community. We held our first student-run session, allowing students from Brazil, China, and others across the world to meet and discuss issues related to how to succeed in graduate school. The series will continue into the fall, where we expect to have talks on "how do large ISPs work". how networking between LEO satellites is done, digital twins, and more. The SIG also helped launch a spinoff of the Networking Channel for the Southeast Asia region, which we hope will promote inclusion of people from that region into our community.

SIGSIM signed a gift agreement with the NCSU Computer Simulation Archive (CSA) to support them over the next three years. 2023 was the first year, we are now in the second year. NCSU CSA contributes significantly to archiving SIGSIM relevant accomplishments.

SIGAda was merged into SIGPLAN this spring and will create a High Integrity Language Technology (HILT) technical committee within SIGPLAN.

Programs and conferences

In 2023-24 SIGMM sponsored 5 conferences fully. Globally, they received satisfactory attendance, some of them with record number attendees. There was high attention to maintain high scientific quality and fairness in the review process. Under the leadership of Miriam Redi and Xavier Alameda Pineda it has been prepared a document for the Steering Committees of SIGMM Conferences that will serve as a guide of good practices for the appointed chairs of future conferences.

SIGSIM PADS joined the ACM Reproducibility Initiative in 2019 by successfully creating reproducibility committees to evaluate papers. This effort has been continued again this year in PADS'24 with five of the 13 authors choosing their manuscripts to be evaluated under this initiative to be awarded their relevant ACM badges.

MICRO (https://www.microarch.org/), which is celebrating its 57th incarnation in 2024, is considered a premiere conference in computer architecture, microarchitecture and hardware/software interfaces, continuing its flagship role in the community. It is our flagship activity, and its impact and participation keep growing, with paper submission counts continuously over 400 (497 in 2024, 15% higher than last year) and participation over 500 in recent incarnations. Accepted papers have also been growing to more than 80-90 in recent incarnations and a record number of 113 accepted papers in 2024.

SIGDOC's *Proactive Siting for Future Conferences* works with interested SIGDOC volunteers and members to build a list of future conference sites for 2025-2028. We encourage all conference chairs to work with their universities to keep the costs of venues and facilities down for affordability reasons and to generate enough revenue. To ensure the inclusiveness of siting decisions, we took care to make sure that SIGDOC will take place in different parts of the country, i.e., Texas, Minnesota, Colorado, and Ohio. We also tried hard to recruit diverse conference teams and program teams, with intergenerational mentoring by pairing senior faculty with junior ones and with the strong presence of underrepresented demographics, i.e., Asian American and African American faculty in the conference teams.

The ACM e-Energy conference program was held in Singapore, and included 31 full papers and 10 Notes papers, as well as three keynote speakers, a poster session, and a banquet. The conference featured

talks from the presentation of the SIGEnergy Doctoral Dissertation Award, the SIGEnergy Doctoral Dissertation Award Honorable Mention, and the SIGEnergy Rising Star Award, as mentioned above. The conference was well-attended. The conference continued to use a 2 deadlines per year format with both a fall and winter deadline with an opportunity for revision within each period. The goal is to give authors more flexibility in submitting and provide them feedback that can improve the quality of their papers.

ACM SIGMOD'2024 was held in fully in-person mode at Santiago, Chile in June 2023. The historical significance of SIGMOD'2024 is that this is the first time the SIGMOD conference was held in South America. We are also glad to report that the fiscal health of ACM SIGMOD remains robust primarily because of very strong corporate sponsorship over the past few years. We are increasingly finding ways to bring the value of ACM SIGMOD to its members (both regular and student members) as well as our corporate sponsors.

SIGGRAPH 2023, the premier conference and exhibition on computer graphics and interactive techniques, took place 6-10 August 2023, marking its 50th year of breakthroughs and innovation. The conference provided a platform for innovators to share their exceptional contributions in digital art, technology, computer science, and other related content. An international audience of more than 14,275 attendees from 78 countries enjoyed the conference and its Mobile and Virtual Access component. Beyond the in-person conference, SIGUCCS continues to engage the community virtually in a number of ways: **Book Club - Professional Development:** Book club meetings are held every other month and are attended by anywhere from 8-15 persons. **Affinity Groups:** Following the conference in 2023, we changed the focus of our virtual events to be more topic based. Each month hosted a group based on the following interests: Educational Technology, Professional Development, User Services.

Volunteer Development

SIGCAS - We are currently developing volunteer drives and concerted efforts to provide a platform for students and early career professionals to participate. We hope to use our organizational platform to arrange a sponsored pre-conference session at SIGCSE 2025 that provides both workshop and publication opportunities for participants who want to explore specific pedagogical approaches to teaching ethical, responsible computing in their college courses.

Over the past few years, SIGWEB officers invested a considerable amount of time to revive and improve SIGWEB's reach to its members and the broader community through publicity channels and social media.

SIGecom's volunteer development is extremely strong. Many dozens of people serve across a wide range of roles: in the conference organization committee; organizing committees for workshops and tutorials; award committees; SIGecom Exchanges editors; SIG executive; and a wide variety of ad hoc committees and special-topic volunteer roles. We are extremely conscious of diversity—particularly, but not limited to, diversity across research areas, gender, and countries of origin—and have been very successful in ensuring that our volunteer leaders are diverse, reflective of the community at large, and top-caliber researchers without exception.

SIGDOC - Proactive Succession Planning for EC, Advisory Board, CDQ Editor Team, and Conference Teams. With the different cycles of EC, Advisory Board, Newsletter Editor, and Conference Teams, we are recruiting volunteering leaders all the time. We work hard to make the process transparent and inviting while keeping a database of members showing interest in such leadership opportunities so that we can bring them back to conversations if their first attempts are not successful. We also work hard to create intergenerational teams so that senior members can work with and mentor junior faculty/graduate students as a part of the SIGDOC culture.