**Annual Report of the SIG Governing Board**

**For the period: 1-July-20 through 30-June-2021**

**Submitted by: Jens Palsberg**

**Date: September 20, 2021**

**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’21 the following individuals held the positions indicated:**

**Name Position Term End**

Jens Palsberg Chair June 30, 2022

Jeff Jortner Past Chair June 30, 2022

Robert E Beck SIG Viability Advisor June 30, 2021

Jian Pei SIG Development Advisor June 30, 2022

John A Hamilton Conference Advisor June 30, 2021

Renée McCauley SGB EC Vice Chair for Operations June 30, 2021

Shan Lu SIG Awards Advisor June 30, 2022

Laurie Fox New SIG Advisor June 30, 2022

Jonathan Aldrich Publications Advisor June 30, 2022

Donna Cappo Staff Liaison

**Council Representatives**

The SGB elects 3 representatives to the ACM council for two-year terms. During FY’21 the following individuals held the ACM Council positions indicated:

Name Position Term End

Jessica Hodgins SGB Council Representative June 30, 2021

Pankaj Jalote SGB Council Representative June 30, 2022

Jeanna Matthews SGB Council Representative June 30, 2022

**Standing Committees**

The SGB is responsible for the oversight of the Federated Computing Research Conference Steering Committee currently chaired by Vivek Sarkar.

**Significant Issue Faced by SGB Leadership**

SIG and Conference leadership continued to face conference format decisions as a result of COVID19. All events in 2021 were held virtually. We encourage you to review the individual SIG Annual Reports in Appendix D for more detailed information regarding conference activity.

**SGB Meetings**

Virtual SGB meetings were held in October 2020 and April 2021.

**Emerging Interest Groups**

Smart Connected Communities

Reproducibility and Independent Verification

**Miscellaneous Appointments**

SIG leaders appointed as committee liaisons:

Name Position Term End

Jonathan Aldrich Publications Board Liaison June 30, 2022

Vivek Sarkar FCRC Steering Comm. Chair July 1, 2023

Kim Tracy History Committee Liaison June 30, 2022

Jeanna Matthews ACM Technology Policy Council June 30, 2022

Michel Beaudouin-Lafon ACM Technology Policy Council June 30, 2022

**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. The nominating committee:

Name Position Term End

Jens Palsberg SGB Chair June 30, 2022

Jeff Jortner Past SGB Chair June 30, 2022

Donna Cappo Staff Liaison

**SIG Membership**

Appendix A summarizes basic SIG Statistics for FY’21. Included are member and subscriber totals and conference activities.

**Membership Counts by class of membership:**

**FY’21**

ACM/SIG Members 23,414

SIG Only Members 9,649

Subscribers 302

Total SIG Members/Subs 33,365

Total ACM Members 103,924

The SIGs overall member/subscriber count is 32,384 as compared to 38,605 in FY’19.

**SIG Program Reviews and Annual Reports**

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

**Program Reviews**

The following SIGs were found viable to continue their status for the next 4 years: SIGACT, SIGGRAPH, & SIGHPC.

**Annual Reports**

Annual reports were received by the submission deadline from: SIGACCESS, SIGACT, SIGAI, SIGAPP, SIGARCH, SIGBED, SIGBIO, SIGCAS, SIGCHI, SIGCOMM, SIGCSE, SIGDA, SIGDOC, SIGECOM, SIGENERGY, SIGEVO, SIGGRAPH, SIGHPC, SIGIR, SIGITE, SIGKDD, SIGMETRICS, SIGMICRO, SIGMIS, SIGMM, SIGMOBILE, SIGOPS, SIGPLAN, SIGSAC, SIGSAM, SIGSIM, SIGSOFT, SIGSPATIAL, SIGUCCS, SIGWEB

Annual reports were not received from: SIGADA, SIGLOG & SIGMOD. This will be noted in their viability reviews. Upon submission, the reports will be added to Appendix D.

**Highlights from Appendix D – SIG Annual Reports**

**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 2021 ACM SIGAI Autonomous Agents Research Award was presented (virtually) at AAMAS 2021 in London, United Kingdom to Professor Vincent Conitzer, the Distinguished University Professor of New Technologies and Professor of Computer Science, Professor of Economics, and Professor of Philosophy at Duke University, as well as Head of Technical AI Engagement at the Institute for Ethics in AI, and Professor of Computer Science and Philosophy, at the University of Oxford. Prof. Conitzer's highly cited work in multi-agent systems spans interdisciplinary areas in game theory, social choice, and economics and includes foundational contributions to the field of computational social choice, helped to define the field of automated mechanism design, and provided complexity results on Nash equilibrium as well as leader-follower games.

The SIGBED Early Career Award was established in 2017. The award recognizes outstanding contributions by early career investigators in embedded, real-time, and cyber - physical systems. In conjunction with CPS-IoT Week in Spring 2021, this year’s award was given to Swarun Kumar of Carnegie Mellon University.

At the 2020 conference, SIGDOC awarded the Best Paper Award to “Migrants as Place-Makers: The Role of Technical Communicators in (re)Locating Place” by Gabriel Lorenzo Aguilar. This paper applies place methodology to water stations for migrants left on the US-Mexico border by the organization Humane Borders. Humane Borders locates water barrels based on proximity to border, migrant water consumption, and rates of vandalism of water stations. Overall, migrants can make place at water stations, decreasing the likelihood of water station relocation and increasing the chance of migrant hydration.

SIGGRAPH presented **7** awards at SIGGRAPH 2020 and inducted **6** people into the SIGGRAPH Academy. The academy inductees include, Kavita Bala, Elizabeth Baron, Eugene Fiume, Ming Lin, Hanspeter Pfister, and Alla Sheffer.

SIGHPC: In recognition of the contribution of supercomputing to approaches to manage the COVID-19 pandemic, the Gordon Bell committee created a new award, the ACM Gordon Bell Special Prize for High Performance Computing-Based COVID-19 Research. The winning paper is AI-Driven Multiscale Simulations Illuminate Mechanisms of SARS-CoV-2 Spike Dynamics (<https://doi.org/10.1101/2020.11.19.390187>)

SIGMM 2020 award for **Outstanding Technical Contributions to Multimedia Computing, Communications and Applications** was awarded to Dr. John R. Smith for his *outstanding, pioneering, and continued research contributions in the areas of multimedia content analysis and retrieval and for outstanding and continued service to the multimedia community*.

SIGMOBILE has several awards that it bestows on community members. In addition to the Outstanding Contributions Award (OCA) for career-long achievements, the Rockstar award for early career achievements, the Distinguished Service Award for service to the community, the Doctoral Dissertation Award for best PhD work in the field, the Test of Time award for papers that had a significant influence in the community, there are various best paper awards at the leading conferences. In addition, SIGMOBILE also recognizes some of the best work in the current year, as identified by a selection committee, which are considered the Research Highlights of SIGMOBILE. Among the notable award winners in FY2021 was Prof. Aruna Balasubramanian (SUNY Stony Brook), who earned the Rockstar Award in recognition of her significant contributions in the areas of mobile systems and mobile Web performance, and her mentoring and leadership efforts in improving diversity in the SIGMOBILE community.

SIGSAC bestowed five individuals with awards in FY2021. Among these awards were the Outstanding Innovation Award (Dawn Song), Outstanding Contributions Awards (Trent Jaeger), Doctoral Dissertation Award (Victor van der Veen) and the Doctoral Dissertation Award Runners-Up (Marc Juarez Miro and Frank Li).

The Awards panel for the 2019 ACM SIGSAM Richard Dimick Jenks Memorial Prize (Chaired by Michael Monagan, Simon Frasier University) selected Michael Stillman as the winner for the Macaulay and Macaulay2 computer algebra systems. The award was presented at ISSAC 2020.  Newly elected incoming Chair Veronika Pillwein will appoint a Chair for the 2021 Jenks Award committee.

SIGSPATIAL - In 2020, the 10-Year Impact Award was given to the following paper from the 2010 conference: “Bag-Of-Visual-Words and Spatial Extensions for Land-Use Classification” by Yi Yang (University of California, Merced, USA) and Shawn Newsam (University of California, Merced, USA). This annual award is given to a regular paper published at their main conference 10 years ago whose value and prescience have become apparent over a long period of time. It is chosen by a committee from their research community.

**Significant Papers and Publications**

SIGACCESS – The **ASSETS 2020 Best Paper** award went to Leah Findlater and Lotus Zhang of the University of Washington, for their work “[Input accessibility: A large dataset and summary analysis of age, motor ability and input performance](https://dl.acm.org/doi/10.1145/3373625.3417031)”. Their dataset captures input performance with a mouse and/or touchscreen from over 700 participants across a range of ages, including people with motor impairments, and its availability should help to accelerate our understanding of the interplay between these and other factors in mouse and touch screen usage.

The new SIGBED blog created as a replacement for SIGBED Review has attracted many contributions by highly active researchers that reflect cutting-edge work on embedded systems being done today. Since its inception, the SIGBED blog has published twenty-five high quality articles on a variety of topics: cutting-edge research, thought-provoking ideas, conference reports, obituary, and more. Sixteen articles were contributed from SIGBED’s team of regular contributors, and the rest were from non-regular contributors in the community. Please see https://sigbed.org/blog/ for more details.

SIGCAS - COMPASS 2021 had an incredibly diverse selection of accepted papers addressing issues, such as identifying hazards in socio-technological systems and biases in automated systems as well as papers on animal protection, crime, health, modeling, inequality, AI, sensing, and many others. Payal Arora, of Erasmus University Rotterdam helped provide a reminder that computers are not magic machines that have a bias towards improving things, a misperception that many in the commercial sector help propagate. COMPASS has submitted a request for a regular ACM journal which is being reviewed for viability by ACM.

SIGCOMM Lifetime Achievement Award: This year, SIGCOMM recognized two Internet pioneers with the lifetime award. Dr. Amin Vahdat from Google, and Prof. Lixia Zhang from UCLA. The award recognizes Dr. Vahdat for groundbreaking contributions to data center and wide area networks, and Prof. Zhang for pioneering work in Internet protocol development. Both awards will be presented at ACM SIGCOMM 2021.

SIGDA EC has developed a procedure to nominate one paper each year (starting in 2021) to be considered as a Research Highlight candidate paper in CACM. Their goal is to select a high-quality paper with more general appeal to help promote research in the design automation field.

A significant proceedings paper, based on clicks, downloads, and citations, was, “Building Design Thinking into Content Strategy.” In Proceedings of the 38th ACM International Conference on Design of Communication (SIGDOC ‘20) and authored by Quan Zhou, this report compares the processes of design thinking and content strategy. It reports two approaches, user journey mapping and storyboarding, which effectively apply the advantages of design thinking to enrich content strategy.

SIGENERGY has created a new magazine, ACM SIGENERGY Energy Informatics Review, which is closely modelled on ACM SIGCOMM Computer Communications Review (CCR). EIR will publish four issues a year, all online, with articles on topics within the SIG’s field of interest. Technical papers accepted to EIR typically report on practical advances or the practical applications of theoretical advances. EIR will serve as a forum for interesting and novel ideas at an early stage in their development. The focus is on timely dissemination of new ideas that may help trigger additional investigations. While the innovation and timeliness are the major criteria for its acceptance, technical robustness and readability will also be considered in the review process. They particularly encourage papers with early evaluation or feasibility studies. In addition, EIR will publish non-peer reviewed editorial content and serve as a forum for the publication of reports from workshops and conferences in the general area of energy informatics. The first issue is expected to be released in November 2021.

SIGITE 2020 had the following significant papers: 1. Deep Learning in the IT Curriculum; Amy K Hoover, Adam Spryszynski, Michael Halper; New Jersey Institute of Technology. 2. Hacking the Non-Technical Brain: Maximizing Retention in a Core Introductory IT Course; Eric M Sturzinger, Daniel S Hawthorne, Thomas A Babbitt; United States Military Academy.

SIGMETRICS - This year's ACM SIGMETRICS Best Paper Award was awarded to the paper "Nudge:

Stochastically Improving upon FCFS", by Isaac Grosof (Carnegie Mellon University), Kunhe Yang (Tsinghua University), Ziv Scully (Carnegie Mellon University), Mor Harchol-Balter (Carnegie Mellon University).

SIGMOBILE continues to invest in GetMobile, SIGMOBILE’s significantly transformed quarterly publication, which is a revamped version of the ACM SIGMOBILE Mobile Computing and Communications Review (MC2R). Each issue of GetMobile consists of a set of regular sections curated by a committed group of editors and has won a lot of praise from the broad community for improved quality of content and articles. GetMobile added several great young editors over the past few issues. The magazine’s content remains excellent thanks to the editors’ effort under the leadership of Landon Cox and the incredible staff of Donna Paris and JoAnn McHardy.

SIGSIM – This year’s SIGSIM PADS Best Paper Award was awarded to the paper “Data-driven Microscopic Traffic Modelling and Simulation using Dynamic LSTM” by Htet Naing, Wentong Cai, Nan Hu, Tiantian Wu, and Liang Yu (Singapore)

**International Activities**

SIGCAS - GoodIT (Information Technology for Social Good) which will be held later this year (September 9-11) in a hybrid mode (most delegates in person, in Rome, Italy, and others attending remotely) focuses on the application of IT technologies to the social good. It focuses on "global citizens uniting to unlock the potential of individuals, technology, and collaboration to create positive societal impact."

SIGCOMM continued its support for the development of a research community in Latin America, through LANCOMM, a student workshop. The SIG would have provided support for both student travel grants as well as invited keynote speakers for LANCOMM'20, but unfortunately the workshop could not be held due to the COVID-19 situation in Brazil.

SIGCSE - A doctoral consortium ran virtually just prior to the 2020 International Computing Education Research Conference (ICER). Students presented their work to the discussants and engaged in discussion about various topics regarding graduate school, research, and careers. The doctoral consortium was attended by 18 graduate students in computer science education. 11 of the participants were women, 5 were men, and 2 participants did not disclose their gender. 8 participants were from the United States, 2 from Canada, 4 from Europe, 1 from Africa, 2 from New Zealand, and 1 from Australia. SIGCSE typically provides travel grants to students and partial funding for lodging during the workshop and during ICER 2020. However, since the conference was virtual, travel support was not needed. Students instead only received free registration for the conferences. The SIGCSE Board will fund up to twenty Doctoral Consortium grants for participants of the ICER 2021 conference.

Virtual SIGGRAPH 2020 played host to the latest innovations in art, science, and technology from more than 1600 contributors across 700 presentations during its two-week release, 17–28 August. To date, the conference has been welcomed and enjoyed by an international audience from 95 countries. Representation from six out of seven continents included participants from the United States, Canada, Japan, New Zealand, Zimbabwe, France, Brazil, Israel, China, and more. Not to be out done, this year’s Exhibition housed more than 80 diverse companies, who showcase the latest in computer graphics hardware, software, and more during custom virtual demonstrations and over 70 curated sessions. Highlights from the conference included a magical keynote from cyber illusionist Marco Tempest, executive director of New York’s magicLab; the presentation of 163 research papers and 69 posters; three world-premiere animated shorts in the [Computer Animation Festival Electronic Theater](https://s2020.siggraph.org/conference/program-events/electronic-theater/); the worldwide release of [Magic Leap’s “The Last Light”](https://world.magicleap.com/en-us/details/com.magicleapstudios.lastlight), a VR Theater selection, and the unveiling of [Felix & Paul Studios’ first AR Project](https://twitter.com/felixandpaul/status/1298252098560237568), a collaboration with The Jim Hensen Company; ACM SIGGRAPH’s two-day Diversity and Inclusion Summit; sneak peek Production Sessions and Talks focusing on not only film and games but prestige TV and advertising; two retrospective panels celebrating pioneers from PDI (Pacific Data Images) and the NYIT Computer Graphics Lab, respectively; and, the first-ever Real-Time Live! global broadcast.

Like many other conferences, SIGMETRICS had to face the challenges posed by the pandemic that led to the cancellation of the physical in-person edition planned in Beijing. Although it was not possible to enjoy the conventional conference experience, we have successfully run SIGMETRICS as a virtual conference on the Gather platform.

SIGSPATIAL planned to have their first international conference in Beijing in 2020. However, due to the COVID-19 pandemic, the 2020 conference was forced to be completely online and the Beijing conference was postponed until 2021. Due to travel restrictions, they are planning to have two components to the 2021 conference: an in-person component in Beijing which will be attended by mostly people based in China and an online component during a time-zone that is more convenient for the US and Europe. Papers will be presented in both components. SIGSPATIAL is looking to go abroad with a completely in-person conference in 2023.

SIGWEB announced [Hypertext Fair Access Initiative](https://www.sigweb.org/conferences/upcoming/32-hypertext-2020-fair-access-initiative) that has been followed by a similar initiative at UMAP 2020 also sponsored by SIGWEB (https://um.org/umap2020/2020/sigweb-support-for-low-income-or-lower-middle-income-countries/). A smaller-scale DocEng 2020 conference was able to offer free registration for all non-presenting attendees. These opportunities were used by several researchers from underrepresented regions. In 2021 SIGWEB expanded these activities to their Web Science conference for which Inclusion was a key part of the conference focus (https://websci21.webscience.org/). For Web Science, SIGWEB established a Fair Access Fund to support attendees from “global south” (<https://websci21.webscience.org/988-2/>). These activities continued for UMAP 2021 (https://www.um.org/umap2021/registration) DocEng 2021 (https://doceng.org/doceng2021/registration), and Hypertext 2021 (https://ht.acm.org/ht2021/registration/).

**Collaboration**

SIGAI, joint with the CCC (Computing Community Consortium) and INFORMS, is co-organizing three agenda setting workshops to explore synergy and opportunity at the nexus of Artificial Intelligence and Operations Research. Each workshop will consist of a set of brief talks designed to inform and generate discussion about opportunities that each community will find novel and exciting. On September 23 and 24, 2021, SIGAI will jointly run the first of three workshops. Each workshop will have about 40 invited participants from across AI and OR. Following this first workshop, SIGAI will co-organize two additional workshops likely in Nov/Dec of 2021 and Jan/Feb of 2022; the foci of those workshops will be set at this coming first workshop but will likely include heavier overlap with policymakers and with practitioners.

SIGARCH and TCCA created a joint task force with two members from each Executive Committee (Boris Grot and José Martínez for SIGARCH, Daniel Jiménez and Moin Qureshi for TCCA) to prepare a best-practices document for anonymity, conflict of interest and ethics guidelines for program committee chairs, authors, and reviewers. A draft of this document was presented to the community for feedback and the feedback is currently being integrated, with plans to make the document publicly available in the fall of 2021. The document will hopefully inspire other SIGS to adopt similar best practices as they see fit.

SIGCSE’s newly-established ACM Global Computing Education Conference (CompEd) will be offered initially once every two years and will be hosted in countries that do not currently have an annual SIGCSE conference. The second conference (CompEd 2021) was scheduled to be held in Hyderabad, India in December 2021, but has been postponed due to the Covid-19 pandemic. The organizers and steering committee feel that this event, drawing people from communities not normally served by a SIGCSE conference should be held as an in-person event and are going to do so when it is determined feasible. The CompEd steering committee is actively seeking out venues in South America for the third CompEd conference.

Budget permitting, SIGMOBILE also occasionally sponsors activities from partner organizations focused on broadening participation, such as the CRA-W conference.

SIGMIS continues seeking out collaborations with AIS special interest groups particularly regarding leadership and diversity/inclusion. The strategy is to make focused events and activities of interest to ACM SIGMIS members available before or during all major MIS conferences – ICIS, HICSS, AMCIS, ECIS, and PACIS – as well as their own standalone conference. This is going slower than expected but they anticipate it will continue to grow over the next few years.

**Programs and conferences**

SIGAI accepted two projects in their 2020-2021 cycle. Try AI: Micro-Internship Edition from Elizabeth Bondi and Alexis Stokes concerned a micro-internship program in which college students may participate in research with a Harvard researcher (PhD student, postdoc, and/or faculty) in the field of artificial intelligence (AI) for 1 week.

SIGACT continues to support student attendance at SODA and STOC by funding Best Student Paper Awards, travel, lunches, and reduced registration fees. SIGACT has also provided additional student support for all its other sponsored and co-sponsored conferences this year. This helps ensure that the maximum number of students can attend these conferences.

SIGAPP: Far East Asian countries such as Korea, China, Taiwan, and Hong Kong are supporting the applied and convergent computing at the government level. Therefore, SIGAPP made new chapters in these countries and increased the number of SIGAPP members through the SIGAPP chapters. Soon, SIGAPP Japan will be established to conduct various academic events with the existing 6 SIGAPP Chapters. SIGAPP will also support the joint seminar or small workshop between SIGAPP chapters of neighboring countries (e.g., SIGAPP Korea, SIGAPP China, SIGAPP Taiwan, and SIGAPP Hong Kong) to have the opportunity to share their research works.

In 2020, Elba Garza, a PhD student at Texas A&M, and Raghav Pothukuchi, a PhD student at UIUC launched CASA in response to calls for mentorship of junior students in the community by senior students. CASA is an independent student-run organization with the express purpose of developing and fostering a positive and inviting student community within computer architecture. SIGARCH has been co-sponsoring CASA together with IEEE TCCA with funds for activities aligned with its mission. SIGARCH also hosts CASA on the sigarch.org website. CASA also runs the “Meet a Senior Student” together with SIGARCH’s “Meet a Senior Architect” at SIGARCH conferences. SIGARCH continued their “Meet a Senior Architect” mentoring program at ISCA’20 under the leadership of Joel Emer. The program matches students with mentors (through questions asked in the conference registration form), providing students the opportunity to meet 1-on-1 with a senior architect for about half an hour at the conference. Starting with 17 mentors and 33 students in 2016, this year the program attracted 140 mentors and 182 students. The program has been growing and has moved on to virtual platforms for the 2020 virtual conferences. SIGARCH has expanded the mentoring program to other conferences (e.g., ASPLOS, MICRO) together with CASA which offers a “Meet a Senior Student” mentoring program.

SIGACCESS helped to grow and diversify the field of accessibility through the ACM Student Research Competition, the ASSETS Doctoral Consortium (sponsored by NSF), a mentoring program for new authors, and diversity awards. ASSETS 2020 also featured user experience reports and a user experience panel on [“lockdown experiences”](https://dl.acm.org/doi/abs/10.1145/3477315.3477317), bringing the lived experience of individuals experiencing disabilities to the research community.

SIGBIO has historically sponsored the Women in Bioinformatics panel as a one and a half hour boxed lunch event during the ACM BCB conference. The event is designed in a such a way as to attract the entire audience attending the conference. The panel discussed issues related to equality in access, opportunities, recognition, hiring, and professional advancement. Starting in 2020, the panel is renamed as the Diversity and Inclusiveness Panel to expand its focus and include issues related to underrepresented minorities. Research on COVID is also of relevance to SIGBIO’s scientific community, and hence they organized events specifically targeting it. One keynote talk is on Real-time Computational science for COVID-19 pandemic planning and response. They also organized a COVID special session with two speakers – one talk on contact tracing in campus communities using Wi-Fi data, and another on the near and long-term challenges of the COVID pandemic.

SIGCHI secured annual contracts with providers of sign language interpreting and real-time human captioning. These services have been used to broaden the reach of SIGCHI’s virtual public events, including their widely-viewed [Equity Talk video series](https://www.youtube.com/playlist?list=PLqhXYFYmZ-VdgN7nr6KoCgtsT5x_Owr2Q). They have tripled their dedicated accessibility budget for the 2021-22 fiscal year and formed an [Accessibility Committee](https://sigchi.org/2021/07/welcoming-the-new-sigchi-accessibility-committee/) to expand support for accessibility initiatives going forward.

From March to August, 2021, a series of ten [Equity Talks](https://www.youtube.com/watch?v=YixuoZNy0Tk&list=PLqhXYFYmZ-VdgN7nr6KoCgtsT5x_Owr2Q) was organized on the topics of (1) being global, (2) making SIGCHI accessible, (3) reviewing and mentorship, (4) infrastructures for equity, (5) understanding gender, (6) research and practice, (7) future of SIGCHI, (8) SIGCHI across chapters, (9) making SIGCHI sustainable, and (10) race and SIGCHI. Each of these sessions was recorded, with captioning and sign language support, and the recordings have been uploaded on SIGCHI’s YouTube channel and summarized in blog posts on the [SIGCHI Medium](https://medium.com/sigchi) publication.

Because of the COVID-19 pandemic, all SIGCOMM conferences switched to a virtual mode in 2020 and the SIG decided early on to extend this to 2021. The switch was particularly challenging for the SIGCOMM 2020 conference that was to be held in NYC and that had to pivot to a virtual mode very late in its planning process. The organizers, however, stepped up to the task and while there were a few scheduling challenges, this first virtual edition of the conference was a success. More importantly, the fact that the organizers embraced the opportunity to explore various alternatives for making virtual conferences more interactive also provided a wealth of information that proved invaluable in helping other conferences, including the 2021 edition of the SIGCOMM conference itself, plan for a successful virtual presence.

SIGCSE - Every other year the SIGCSE Board runs a workshop for department chairs. The SIGCSE Department Chairs Roundtable features small group discussions on challenges of being a Department Chair and finishes with a panel of diverse and experienced Department Chairs. The group discussions tackle topics such as the significant administrative and personnel issues that chairs must handle; leadership and management styles, time management, legal issues, establishing priorities, and communication.

SIGDA - Design Automation WebiNar (DAWN) organized three webinars in August, September, and December 2020. The topics cover hardware security, manuscript publishing, and quantum computing. More details about DAWN can be found at: [www.eda-dawn.org](http://www.eda-dawn.org).

SIGECOM introduced a winter meeting this year. The first SIGECOM Winter Meeting was held virtually on February 25, 2021. The workshop lasted six hours, combining a lightweight technical workshop program with ample opportunity for socialization. The main goal of the meeting was to bring the SIGECOM community together, albeit in a virtual environment, motivated in part by the relative lack of in-person gatherings the past year. The topic of the program was on auction models beyond independent private value (IPV) settings, starting with common-value auctions and interdependent valuations and leading through the resulting insights about the importance of implementation details in market design. The format included tutorials, a social program, and invited talks on current related research. The workshop emphasized being inclusive to young researchers and those outside the core field, while also encouraging active participation and networking.

SIGEVO: GECCO 2021 (July 2021) This was a pure online event located in Lille. Slightly lower submissions (362) than in previous years, perhaps due to large wave of COVID in February. Record number of participants: 944. LBA submissions was lower than previous year. Competition also had higher submissions; Workshops were pretty much the same. iThenticate was used for the first time. Very positive experience. Opening keynote ~280 attendees, poster sessions ~200 attendees, second keynote ~200 attendees, SIGEVO keynote ~337 attendees. Those who entered Gathertown liked it. ACM YouTube channel has a limit of 100 video uploads per day, but we had 441 videos in the GECCO 2021 playlist. Must realize that one must start early, or otherwise have ACM increase this limit.

The SIGIR 2020 conference, which took place online, hosted from Beijing, broke the record set in 2019 for largest SIGIR conference with over 1,500 attendees. In addition, due to conferences becoming virtual events, SIGIR converted their Student Travel Award program into a registration waiver program and expanded it to all student co-authors of accepted papers. They were able to waive registration fees for all student co-authors of papers attending the SIGIR 2020 conference in July 2020, and they have continued the program throughout the year, waiving registration fees for students for JCDL 2020, ICTIR 2020, CIKM 2020, WSDM 2021, and CHIIR 2021.

SIGITE: The 21st ACM SIGITE Annual Conference on IT Education took place virtually, October 7-9, 2020, and was hosted by the University of Nebraska Omaha. There was an increase in attendees and submissions in comparison to the previous year, as follows:

• 235 attendees (vs. 153) +82

• 118 submissions (vs. 88) +30

SIGKDD: KDD 2021 was held successfully. It attracted over 3000 attendees. SIGKDD also sponsored the WSDM 2021 conference, which was held successfully online. New events were designed in KDD 2021 to strengthen EDI. For example, EDI topics are seriously addressed in the Environmental, Social, and Corporate Governance (ESG) Day, the Trust Day, and the Women in KDD Workshop. In addition, SIGKDD ran the Community Impact Program. The goal of the program is to support projects that promote data science and help the data science community to grow, broaden, and diversify. This year, SIGKDD funded 2 projects for online summer schools.

SIGMIS started planning for the 2022 SIGMIS conference as a face-to-face conference in Atlanta, Georgia, USA. They will have to see how attendance returns when they meet face to face, as will many other conferences. Their submissions were largely the same as in recent years this time around, however, they did not have poster sessions which reduced participation, but they hope it will return with the reintroduction of this conference feature.

SIGMM centralized student travel to all their SIGMM-sponsored conferences meaning there is a consistent and equal process for application, selection, and approval of travel awards, as well as consistency in the amount of these awards, across all their conferences. In 2021 SIGMM introduced carer awards to support online attendees at SIGMM-sponsored conferences who may need additional funding for childcare or to care for an older relative, for example, to fully engage with an online event.

SIGOPS - HotStorage used to be a workshop sponsored by the USENIX organization. Starting from this year, it is sponsored by ACM SIGOPS instead for a 3-year experiment period. The first instance of ACM HotStorage was held successfully in late July.

SIGPLAN - In 2021, SIGPLAN started SIGPLAN-M, a subcommittee of SIGPLAN, <https://www.sigplan.org/LongTermMentoring/> 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.

ISSAC 2020, July 20-23, was to have been held in Kalamata, Greece, but, due to Covid-19, was held online. It was organized "in-cooperation" with ACM / SIGSAM. ISSAC 2021, which will be held 18-23 July, will run in hybrid mode, with some participants on-site in St. Petersburg, Russia, but the majority attending online. It will be sponsored by ACM / SIGSAM.

SIGSIM – A special committee on space simulations is being formed to bring new researchers and activities in federated simulation technologies for space models such as lunar and Mars missions. In addition, an interaction group entitled “Pioneers of Simulation” was launched as a community resource to tap into the expertise and experience of past M&S giants.

SIGMICRO’s flagship conference is MICRO, which is in its 54th incarnation in 2021. MICRO conference (https://www.microarch.org/). MICRO is growing in terms of attendance, submissions, and impact. MICRO 2020 received a record number of 446 full-paper submissions (30% higher than MICRO 2019), out of which the program committee selected 82 papers for inclusion in the program – an acceptance rate of 18%. In addition to the 82 papers, the program also featured three keynotes and a track highlighting the ACM Student Research Competition. The keynotes were delivered by Srilatha (Bobbie) Manne, Cristina Silvano, and Rich Wolsky. The conference, held online, was very well attended, and received very positive reviews as indicated by the MICRO Conference Survey organized by SIGMICRO (which can be found here: <https://www.sigmicro.org/resources/microsurveys.php>.

SIGMOBILE held virtual editions of MobiCom, MobiSys, MobiHoc, SenSys, UbiComp, SEC, and HotMobile conferences over the past year. The conferences experimented with different registration fee models, conference schedules, and tools for facilitating networking during virtual conferences. Many conferences offered free registration, while some chose to charge a nominal registration fee to cover costs. Conference schedules ranged from our conventional 5 day model, over a reduced half-day model, to a 2nd (replay) track to accommodate audiences in a different time zone. Conferences adopted the gathertown tool to facilitate networking in small groups.

Use of SIGMOBILE’s YouTube channel has risen sharply and become even more impactful with the shift to virtual conferences. With speaker approval, recordings from major conferences and workshops are archived on SIGMOBILE’s YouTube channel. This content is publicly available, and anyone can now watch the talks from the conferences at their convenience. Engagement on this channel shows a 280% increase in views and over 600 new subscribers compared to the prior year. Many of SIGMOBILE’s viewers are from countries that are traditionally underrepresented at their conferences, including Asia and Latin America. This channel thereby allows SIGMOBILE to reach many more constituents than their conferences and workshops currently do.

The SIGSOFT Webinar series remains very popular; in the past year, SIGSOFT organized webinars on topics such as deep learning, gender in open source, peer reviews, and program comprehension. Unrelated to their Webinar success, The Software Engineering Notes is now distributed exclusively in electronic form. The newsletter provides an update to the SIGSOFT community about ongoing efforts as well as other reports.

SIGSOFT continued the Conference Surplus Reinvestment, which was launched in FY19. The surplus reinvestment for Year N of a conference is 25% of the Conference Net from Year N-2 and 25% of the Conference Net from Year N-3. A limitation of the program is that it currently requires a significant administrative overhead.

SIGSPATIAL continued to maintain the SIGSPATIAL Special Newsletter. This newsletter has three issues per year (March, July, and November). The November 2020 issue covered event reports including reports of all ten SIGSPATIAL 2020 satellite workshops and the finalists of the ACM SIGSPATIAL 2020 student research competition who represented SIGSPATIAL in the ACM finals. Both March 2021 and July 2021 issues are currently in preparation. Furthermore, ACM SIGSPATIAL 2020 had a GISCup programming contest. In 2020, this focused on competitive spatio-temporal searching in which a managed fleet of mobile agents search for stationary resources on a road network. The competition received six submissions and the teams totaled 14 members submitting formal entries. Two entries were selected as winners, and were additionally qualified for an invited paper, an oral presentation, and award prizes. Google, Maxar, and Microsoft provided sponsorship for the SIGSPATIAL Cup and the awards for the winners.

SIGUCCS offered three webinars this past year. Webinars offered between July 2020 and June 2021 were:

* [How to Create an Effective Online Poster](https://youtu.be/NOKjti6KXcA)
* [SIGUCCS Mentoring Program – Fall 2020](https://youtu.be/T36F9g8bBhg)
* [Communication Skills and Teaming are a Project Manager’s Best Friend](https://youtu.be/R8aElAKjL24)

Each webinar is recorded and made available on [SIGUCCS’s YouTube Channel](file:///C:\Users\faraz.iqbal\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\RND7BQGK\(https:\www.youtube.com\user\SIGUCCSVideos)).

As an alternative for webinars, SIGUCCS began hosting Zoom hangouts in September 2020. Hangouts are a way to keep in touch, stay connected, and share ideas about a specific topic. The following topical hangouts were hosted:

* September 2020 - Remote work – the good, the bad, and the ugly
* October 2020 - Scary Support Stories
* November 2020 - Thankful Thursday
* December 2020 - Coffee, Cocoa, Cookies & Community
* January 2021 - New beginnings
* April 2021 - Past, Present, and Future (as part of SIGUCCS ‘21)

SIGWEB - The Web Conference (formerly WWW), the most important event for researchers in the Web, is now added to the list of SIGWEB-sponsored conferences. The first Web conference under ACM SIGWEB sponsorship will be in Lyon in 2022.

**Volunteer Development**

SIGACT now has a few sub committees working to improve diversity in TCS, by running the STOC Theory Women Workshop (Barna Saha, Sofya Raskhodnikova and Virginia Vassilevska Williams) and as well as a sub-committee to identify top new papers for coverage in CACM (Research Highlights) consisting of Ronald de Wolf, Yuval Ishai, Irit Dinur and Jelani Nelson (chair). SIGACT hopes to recruit more volunteers for other activities.

SIGAPP’s volunteer process has been successful, but we will continue to improve and establish our volunteer development process which is an essential issue for SIGAPP. SIGAPP Executive Committee keeps looking for new volunteers to serve as future SIGAPP officers. We have encouraged SIGAPP members to serve as a volunteer for SAC conference which is the flagship conference of the SIGAPP.

The SIGAPP volunteer development process:

* Encourage to submit the track proposal of the SAC, and serve as the track chair
* Encourage to serve the SAC organizing committee member based on the successful track chair records.
* Encourage to be a candidate for the SIGAPP officer election.

SIGWEB instituted the mechanism of conference liaison. For each of their sponsored or co-sponsored conference series, SIGWEB works with its steering committee or similar body to nominate one representative, usually a member of the series SC to serve as the series liaison. The liaisons join SIGWEB officers and members at large to form SIGWEB Executive committee. Within the reporting period, SIGWEB considerably updated its Executive committee ensuring participation of active and well-informed members.