# ACM SIGGRAPH Annual Report July 2018 to June 2019 Fiscal Year 2019

Submitted by Jessica Hodgins, President

#### Mission:

ACM SIGGRAPH's mission is to nurture, champion, and connect researchers and practitioners of Computer Graphics and Interactive Techniques. (Approved by ACM August 2019)

## Five-year Vision: Enabling Everyone to Tell Their Stories

By **Everyone**, we mean not just our traditional audiences of professional movie, animation, and game makers but everyone with a story to tell, be they trained or novice, with significant time for the development of their story or intending to publish with just a single click.

By Tell, we mean all mechanisms of conveying a story: watching, experiencing, interacting, and creating.

By **Stories**, we mean not only our traditional media of movies, animations, and games but also newer forms of media such as augmented, virtual, or mixed reality, or forms of interactive and sensory experiences not yet invented. Stories may be narrative, abstract, educational or scientific. They may be purely digital or they may involve the physical artifacts either through incorporation or creation.

## Why this vision?

- Computer Graphics and Interactive Techniques (CG&IT) is about communicating in innovative and inspiring ways.
- Telling stories using CG&IT, whether it's explaining research findings, entertaining huge audiences or helping people understand the world, can change societies and cultures-we want to be the showcase for the existing and emerging fields that use CG&IT to connect people.
- We want to ensure we are relevant and meaningful to our existing diverse communities—this diversity of content and community has always been a strength of SIGGRAPH.
- We want to welcome newly emerging communities—this breadth is critical to our future success.

## **Strategy Work:**

For the past three years, the ACM SIGGRAPH Executive Committee has been directing its work to support the strategic needs of our communities. We devote the majority of in-person meeting time to strategic discussions and save the administrative and operational work for bi-weekly hour-long tele-cons. We have formed six strategy committees within the EC with the assistance of a few non-EC members and some of the standing chairs:

## **Nurturing our Existing Communities**

The objective of this committee is to develop strategies to retain existing communities as part of ACM SIGGRAPH, and in particular to encourage participation in our conferences. We have worked on a number of projects, and seen some of them through to implementation.

In general terms the areas we are developing include:

- 1. Member benefits and Mentoring
- 2. Conference events
- 3. Future of our discipline

#### Member Benefits

We are currently developing a detailed report on member benefits and a comparison with the other ACM and IEEE SIGs. The strategic goal is to move our organization to being *the* professional organization for computer graphics and interactive techniques. The way forward we see is through mentoring and this mandate will come under new EC standing chairs.

Providing services to young people and making them feel a part of the organization has long been a SIGGRAPH strategy through student volunteers and student chapters. This year we developed a student travel grant program, and we have a new chair, Mathew O'Toole (CMU Faculty) to build a committee to administer the program. The EC have voted \$40k to the program and the new committee is charged with building on these funds. The Diversity and Inclusion Chair, Tony Baylis, is also involved in exploring funding possibilities.

### Conference Events

Our committee introduced the Thesis Fast Forward at SIGGRAPH 2018 (the major conference of ACM SIGGRAPH held in North America, referred to as SNA going forward), and took over oversight of the doctoral consortium for SA18 (SIGGRAPH Asia) and SNA19. We also introduced the thesis fast forward at SA in 2019. The thesis fast forward was very popular at S18, but the doctoral consortium was a closed event at SNA18 and therefore only serviced 8 students. The open format doctoral consortium at SA18 was reasonably well attended and became more of an event for all PhD candidates as well as the participants. We are keeping the two different formats for 2019 and later this year will review the events and how they meet the objectives of our communities.

We are also introducing more participation by the organization at the SIGGRAPH village, and more communication with our members. Initially this will be done through posters from strategy groups and three separate town halls (BOFs) with the goal of getting input from our attendees and members.

Future of Computer Graphics and Interactive Techniques

An initial committee exists to strike a larger committee jointly with Eurographics. A BOF has been organized for SNA2019 led by the 2020 papers chair, Szymon Rusinkiewicz. A report on progress is under preparation, and a workshop is being organized for late 2019 or early 2020.

#### **New Communities**

We are reaching out to new communities to broaden the base of SIGGRAPH to support our members as they evolve their research and industry careers to fit the changing landscape in computer graphics and surrounding areas. Our primary activities are a series of workshops at both SNA and SA and a set of morning talks at SNA.

SIGGRAPH Frontiers Workshops: Full day, interactive workshops on Computer Graphics for Autonomous Vehicles, Content Generation for Workforce Training, Sim-to-Real: From Skilled Virtual

Agents to Real-World Robots, Immersive Visualization, Cybersickness: Causes and Solutions, and Textiles: Virtual to Actual.

SIGGRAPH Frontiers Talks: Morning talks on How Computer Graphics Expertise Will Further the State of the Art in Machine Learning, Imaging a Black Hole with the Event Horizon Telescope, Metric Telepresence, Speculative Futures, Virtual Reality and the Patient Experience, and Telling Complicated Scientific Stories with Graphics

#### Data

The data strategy group's priority is to enhance our understanding of SIGGRAPH's community and future. We are also pushing for an effort to increase the quality of our data. Past and current data are not validated so the accuracy of our analysis is limited. In the context of membership benefits, we would like to better understand how our membership is evolving. In the last year, a cleanup and analysis of membership and registration data (SA and SNA) is now allowing some questions to be asked about variability of attendance and membership across different demographics. We looked into extracting an aggregate understanding of SIGGRAPH schedules from previous SIGGRAPH mobile apps, but found that this was not possible. Fortunately, with schedules in Linklings for SA2019, there will be new opportunities for understanding how different groups of members prioritize different sessions at the conference.

The data committee has also been working on a new set of short and concise survey questions to help fill in holes in demographic membership and attendance data, with the goal to better understand "who is SIGGRAPH". This effort is in conjunction with Smith-Bucklin Marketing and the Diversity and Inclusion committee. Another effort included an investigation of several recent years of conference submission data, which concluded that total submission counts at all top venues (CGF TOG SA SNA) are flat as opposed to shrinking, however, this is in comparison to strong growth at SIGCHI and enormous growth at ML/vision venues. Other tasks on the agenda (but with minimal progress) include looking into data visualization to allow the whole community to see who SIGGRAPH is, and the development of a quick reference sheet for committee and exec members for answering common questions. There have also been efforts to flush out a collection of SIGGRAPH Stories (tire tracks) to help highlight the impact and achievements of the graphics community. Finally, with the digital presence committee we have recently looked at other existing online networks and future possibilities for helping members network and connect with one another year round (e.g., LinkedIn, Alumnifire).

### Communication

As part of our subcommittee's mission to reclaim SIGGRAPH's brand and mindshare as the premiere organization for cutting edge computer graphics and interactive techniques, our team has been focused on three core initiatives:

## **Computer Animation Festival Advisory Board:**

This past year, the Computer Animation Festival Advisory Board ("CAFAB") was established and launched with the goals to leverage, elevate and unify the Computer Animation Festivals and Electronic Theater (from North America and Asia) as the organization's most visible asset as a means to increase brand awareness of SIGGGRAPH. As part of this, the CAFAB, has started to develop a set of common policies and vision, mission and goals across both conferences as well as for the international Traveling Show. After defining the groups, the Board has prioritized and structured its focus around a five-year strategy, delivering on its first two proposals, digital marketing for the Traveling Show and consistent policies for the Animation Festival Awards between SIGGRAPH Asia and North America.

## **Strategic Marketing Audit:**

The ACM SIGGRAPH organization has long struggled to help its constituents and members to understand the value of the organization beyond the conference. Simultaneously, as computer graphics have become ubiquitous, the ACM SIGGRAPH organization has lost some of its value as the brand that represents the cutting edge of computer graphics and interactive techniques in the hearts and minds of top researchers, practitioners and partners. To help reverse these trends, as part of the ACM SIGGRAPH Executive Committee's strategy work, the Executive Committee has decided to retain a professional marketing and communications consultancy. The EC wishes to understand how the organization is perceived beyond the conference, the landscape in which we currently compete for members and thought leadership, what our strengths and weaknesses are with regard to marketing and communicating our value proposition, and most importantly, make recommendations that are likely within reach of a volunteer driven organization.

#### **Conference in a Box:**

Similar to how the EC is hoping to use leverage the CAFAB to increase discovery and awareness of SIGGRAPH, the Conference in the Box is the third initiative this team is advancing. The premise is that the EC develops a common piece of branded hardware/equipment that is used for chapter events and conferences outside the normal definition of CG&IT. The common setup is a portable ACM SIGGRAPH Branded display with imagery and video content that introduces the organization. It would also likely include a flat screen monitors and playback device that included recent video loops from the most recent conference that align with strategic marketing messages. For chapters, with the addition of a whatever speakers they want for the main content, along with the provided video segments, they would be able to put-on mini-conference to help their attendees know what the main conferences are about. For 'analogous' conferences (conferences that the organization trades space with such as SID and Unity, or with industries who we want to raise awareness (e.g.; Automotive), this same display can sit in a 10 x 10' booth with more specific video content on the display and volunteers can stand in front of it to talk to people while the video clips play in the background.

## **Digital Presence**

We are continuing to improve our Digital Presence by collecting and archiving current and historical assets and making them accessible through search and exploration interfaces. We are investigating ways to aggregate and present relevant news and social media content on our website. We are seeking volunteers and contractors to help with these and related projects and exploring a path to partner with SIGCHI.

## Governance

The Governance Committee examines the policies, procedures, and structure of ACM SIGGRAPH and recommends changes to the Executive Committee who approves or rejects them. Almost all of the changes below are reflected in the ACM SIGGRAPH Policy Guidelines.

In the past year the Governance Committee has recommended, and the Executive Committee has approved, the following major changes:

Created eight new Standing Committees: Awards, Diversity and Inclusion, History, Interactive and Immersive Experiences, Lifelong Learning, Practitioner Career Development, Professional Development, Research Career Development, and History.

Substantially modified the mission of the following Committees: Communications, Early Career Development (S3), External Relations, International Resources, and Publications.

Grouped all of the Standing Committees into five groups with one or more EC Directors as liaisons to each group.

Redefined the workload of the elected EC Directors.

Substantially changed Section IV: ACM SIGGRAPH Budgets and Financial Policies.

Revised SECTION VIII: SIGGRAPH ASIA to make it more consistent with SECTION VII: SIGGRAPH Conference.

Revised SECTION IX: SPECIALIZED CONFERENCES to give the Financial Committee more input into the budgets of the Specialized Conferences.

Created SECTION X: VOLUNTEER RECOGNITION to standardize volunteer recognition across all of the ACM SIGGRAPH groups.

Made numerous minor edits and changes in the Policy Guidelines.

Created five new versions of the Policy Guidelines that include all of the above.

Rewrote the Nominations Committee Call for Executive Committee elections to reflect the increased emphasis on strategic work and the bylaws changes.

## Conferences

#### **SIGGRAPH 2018**

The annual North American SIGGRAPH conference is a five-day, interdisciplinary educational experience celebrating the latest developments in computer graphics and interactive techniques. It includes a three-day commercial exhibition that attracts hundreds of exhibitors from around the world. For SIGGRAPH 2018, more than 16,500 people from Canada and 87 other countries attended. Some events were livestreamed, which generated more than 60K views on ACM SIGGRAPH's YouTube chancel and more than 50K views on the SIGRGAPH conference Facebook page. The conference also hosts the international SIGGRAPH Computer Animation Festival, the leading annual festival for the world's most innovative, accomplished, and amazing digital film and video creators. This year's theme was "Generations," in which 25 short films and presentations explored the theme of the next generation of storytelling.

A couple other offerings in 2018 enhanced the conference experience. It was the inaugural year of the Immersive Pavilion, which included virtual, augmented and mixed reality experiences for attendees. It also marked the return of the Business Symposium with sponsorship and involvement from Creative BC. The Symposium consisted of panels, discussions, roundtables, keynotes and interactive surveys, and featured speakers from an array of industries and backgrounds to explore the future of innovation, design and technology.

To quote 2018 conference chair Roy C. Anthony, "The enthusiasm and energy demonstrated at SIGGRAPH is second to none. I saw thousands of people openly sharing new ideas and expressing their creative energy within every square foot of the Vancouver Convention Centre. This year, I leave energized, not only by the inspiration that SIGGRAPH always delivers, but to have also been able to give back to this wonderful community, which has inspired me to be inventive and to create, as well as helped me along the way in my career. These past 18 months as Conference Chair have been a true honor for me — an experience I will never forget."

## **Breakdowns of Technical Paper Submissions:**

Received 464 complete submissions Accepted 128 juried 27.5% acceptance rate

## **Topics:**

Animation/Simulation - 36 out of 128 = 28% Imaging/Video - 23 out of 128 = 18% Interaction/VR - 6 out of 128 = 5% Methods & Applications - 9 out of 128 = 7% Modeling/Geometry - 38 out of 128 = 30% Rendering/Visualization - 16 out of 128 = 13%

#### **SIGGRAPH Asia 2018**

The 11th ACM SIGGRAPH Conference and Exhibition on Computer Graphics and Interactive Techniques in Asia took place in Tokyo, Japan, from 4 - 7 December 2018. It is the third time that SIGGRAPH Asia has been hosted in Japan. The annual event, which rotates around the Asian region, attracts the most respected technical and creative people from all over the world who are excited by research, science, art, animation, gaming, interactivity, education and emerging technologies.

This year we received 353 completed submissions, a significant increase compared to last year. Each submission was reviewed by at least 2 members of the papers committee, as well as at least 3 experts from outside the committee. In total, 1636 reviews were completed by 636 reviewers. The papers committee, consisting of 46 experts recruited from academia and industry, then made final decisions to accept 106 papers for presentation at SIGGRAPH Asia 2018. The acceptance rate was 30%.

## Awards

SIGGRAPH presented six awards at SIGGRAPH 2018, and inducted 52 people into the newly formed SIGGRAPH Academy:

## 2018 Computer Graphics Achievement Award: Daniel Cohen-Or

For his seminal contributions in the field of geometry processing, shape analysis and image processing. The Computer Graphics Achievement award is given each year to recognize an individual for an outstanding achievement in computer graphics and interactive techniques.

## 2018 Significant New Researcher Award: Gordon Wetzstein

For his work in advanced display hardware and display-specific rendering techniques. The Significant New Researcher Award is awarded annually to a researcher who has made a recent, significant contribution to the field of computer graphics and is new to the field.

## 2018 Outstanding Service Award: G. Scott Owen

For his long-term, visionary, and dedicated service to ACM SIGGRAPH

## 2018 Lifetime Achievement Award in Digital Art: Monika Fleischmann

For pioneering the field of new media art through research projects based on interface design and new forms of communication

### 2018 Practitioner Award: William T. Reeves

For his ground-breaking techniques in Particle Systems and Z-Depth shadows, and in production software with the RenderMan renderer

## 2018 Outstanding Doctoral Dissertation Award: Jun-Yan Zhu

For his pioneering use of modern machine learning in computer graphics, with the first dissertation to systematically attack the problem of natural image synthesis using deep neural networks.

## 2018 SIGGRAPH Academy inductees

- **Ivan E. Sutherland**: For Sketchpad and for providing a vision for computer graphics that has sustained the field.
- **Donald P. Greenberg**: For pioneering original ideas, and for education of graduate students in computer graphics and computer-aided design.
- Andries van Dam: For unwavering pursuit of excellence in the field of computer graphics, and for contributions to computer graphics education and related fields.
- Ed Catmull: For outstanding creative contributions as an individual researcher, for inspirational leadership, organizational direction and mentorship
- **José Luis Encarnação**: For leadership in applied research, for work in establishing international graphics standards, and for contributions to computer graphics education.
- James Foley: For strong and sustained leadership in computer graphics education and research, and for dedication to the profession through books and his work with ACM/SIGGRAPH and ACM publications.
- **James F. Blinn**: For pioneering work in rendering and educational animation, and for exemplary contributions as an author.
- Pat Hanrahan: For leadership in rendering algorithms, graphics architectures and systems, and new visualization methods for computer graphics.
- **Tomoyuki Nishita**: For work in the rendering of natural phenomena that has inspired computer graphics researchers all over the world.

- **Nelson Max**: For pioneering work in scientific visualization, for deep technical contributions, and for generous encouragement and stimulation of ideas and intellectual exchange.
- **Robert L. Cook**: For numerous pioneering technical contributions to rendering, and for extraordinary service.
- James T. Kajiya: For numerous pioneering technical contributions to rendering, and computer graphics hardware design.
- **Turner Whitted**: For the invention of recursive ray tracing and for groundbreaking contributions to the areas of shaders, procedural graphics, graphics hardware, novel sensors, and sensor arrays.
- **Henry Fuchs**: For contributions to augmented and virtual reality, telepresence and graphics hardware, and for educating the leaders in the field of computer graphics.
- Jessica Hodgins: For foundational work in character animation, for support and cultivation of
  emerging researchers, and for extensive volunteer service to the computer graphics community.
- Lynn Hershman Leeson: For paradigm-changing innovations with a broad range of emergent applications, and pioneering new modes of storytelling, all accomplished with a strong aesthetic and insightful cultural discourse.
- Roman Verostko: For seminal contributions to the creation and promotion of digital art.
- Yoichiro Kawaguchi: For creative and innovative artistry, giving life to a stunning aesthetic derived from dedicated research in computer technology, biological forms, and contemporary artistic practice.
- **Charles Csuri**: For visionary work in the early recognition of the aesthetic potential of computer graphics, and for a lifetime of dedicated teaching and creative production.
- **Jean-Pierre Hebert**: For pioneering achievements in creating art through computer programming, and using algorithms and innovative techniques for new forms of creative expression.
- Manfred Mohr: For pioneering achievements in creating art through algorithmic geometry.
- Lillian Schwartz: For pioneering work using computers in art including graphics, film, video, animation, special effects, virtual reality and multimedia, and computer-aided analysis of art and architecture.
- Steina Vasulka: For pioneering work in video as a creative medium.
- Ernest A. Edmonds: For major contributions to the development of computational art, and to the broader field of contemporary art.
- Monika Fleischmann: For pioneering the field of new media art through research projects based on interface design and new forms of communication.
- James H. Clark: For the development of the "Geometry Engine."
- Loren Carpenter: For pioneering work in the design of algorithms for generating raster computer graphics, and for computer graphic images that mimic photographic realism.
- Alan H. Barr: For contributions to graphics, primarily for extending computer graphics shape modeling to include physically based and teleological modeling.
- **John Warnock**: For PostScript, which embodies a major contribution to imaging models, and to integration of graphics and text.
- Alvy Ray Smith: For seminal contributions to computer paint systems.
- **Kurt Akeley**: For contributions to the architecture, design, and realization of high performance 3D graphics hardware systems.
- Marc Levoy: For pioneering work in rendering volumes without an intermediate surface representation.
- Przemyslaw Prusinkiewicz: For work in the modeling and visualizing of biological structures.
- Michael F. Cohen: For the development of practical radiosity methods for realistic image synthesis.
- Tony DeRose: For seminal work in making subdivision surfaces a practical geometric modeling technique.
- David H. Salesin: For pioneering the field of non-photorealistic rendering in computer graphics.
- David Kirk: For bringing high performance computer graphics systems to the mass market.

- **Peter Schröder**: For pioneering work in geometry processing and multiresolution modeling.
- **Hugues Hoppe**: For pioneering work on surface reconstruction, progressive meshes, geometry texturing, and geometry images.
- **Jos Stam**: For pioneering work on subdivision surfaces, and on fast algorithms for the simulation of natural phenomena, especially fire, fluids, and gasses.
- **Thomas W. Sederberg**: For pioneering work on free-form deformations, and the use of algebraic geometry in geometry modeling.
- **Greg Ward**: For the development of the Radiance synthetic imaging system.
- **Ken Perlin**: For broad contributions to and impact on computer graphics, ranging from novel mathematical approaches for modeling to hardware interfaces.
- **Michael Kass**: For significant contributions to computer graphics, ranging from image processing to animation to modeling, and in particular for the introduction of optimization techniques as a fundamental tool in graphics.
- **Richard Szeliski:** For pioneering contributions at the intersection of computer graphics and computer vision, particularly in image-based modeling and rendering.
- **Greg Turk**: For contributions to physically-inspired mathematical application in graphics, particularly texture synthesis, geometric modeling, and physical simulation involving thin structures
- **Holly Rushmeier**: For work on global illumination, material capture, and the display of high dynamic range images.
- **Thomas Funkhouser**: For work in 3D shape-based retrieval and analysis, and for work on interactive systems for both visual and acoustic modeling of complex virtual environments.
- Steve Marschner: For contributions to modeling the appearance of natural materials.
- Fredo Durand: For seminal contributions to the field of computational photography.
- Ramesh Raskar: For numerous, impactful research contributions to computational imaging and light transport.
- **Daniel Cohen-Or**: For seminal contributions to the fields of geometry processing, shape analysis and image processing.

### **Standing Committees:**

## **Chapters Committee**

Promotes, plans and facilitates the full integration of Chapter activities into ACM SIGGRAPH while identifying and facilitating the flow of additional ACM SIGGRAPH benefits through to Chapters. Provides a link for communication between ACM and Chapters regarding the details of ACM policies and procedures. Devises best "face" for Chapters on ACM SIGGRAPH Web presence. Ensures compliance with all relevant policies and procedures.

Chapters continue to enhance the work of ACM SIGGRAPH. The total number of chapters remains fairly constant. Notably, however, we chartered a student chapter outside of the U.S., in Turkey. Also, the Montreal chapter was resurrected and is doing well. Our conference activities were well received, with successful workshops at both SIGGRAPH and SIGGRAPH Asia. Although smaller in attendance, the workshops increase the camaraderie among chapter leaders and other members of the organization and conference. The PSCC continues to build tools for chapters, including Google team drives for each chapter and a Slack channel for leaders to communicate and ask questions. The current Chair of the PSCC has chosen to step down, and we look forward to working with the new Chair.

## **Communications & Membership Committee**

Recommends and then implements appropriate communication channels for the organization and its constituents. Designs and supervises build out of ACM SIGGRAPH electronic presence. Works with the EC to realize strategic communication and marketing goals. Oversees the SIGGRAPH Village at both SIGGRAPH conferences.

We have had a stable core group of contributors this year. Melanie Farmer has continued to write articles for the website and for the Conference. Theresa-Marie Rhyne has done an exceptional job getting member profiles up and enabling everyone to tell their story. Alex Bryant's efforts in the social media have increased our rate of forwards and shares by 181%. Adding new people to the team has met with some success. Tosh Araki continues to do design for the organization, and he produced the banners for the Conference in a Box concept. Three other people were interviewed to work with the website, but tasks were never completed by them.

In the last twelve months, my primary focus has been the website and its conversion from Drupal to WordPress. The port to WordPress was done by a contractor, iWitness Design. With this redesign came a new navigation. Most of my volunteer cycles in the past six months has been fixing the broken links and orphaned pages. These were a priority because they effect SEO and adversely affect our rankings in search engines.

Efforts with the strategic planning in both the Marketing and Communication and Online Communities has taken priority in some respects, with the Marketing and Communications team having the most traction. Efforts now are around determining the content needed for the Conference in a Box.

## **Digital Arts Committee**

Fosters year-round engagement and dialogue within the digital, electronic, computational, and media arts. Facilitates dynamic scholarship and creative programming for the digital arts within the ACM SIGGRAPH organization. Promotes collaboration between artists and the larger computer graphics and interactive techniques community. Promotes collaboration between the Digital Arts Committee (DAC) and conference art programs.

This year the Digital Arts Community continued its focus on engaging with the Annual Conferences and the broader Digital Arts Community. At the annual conference in 2018 we debuted a new online, juried exhibition, "Origins + Journeys," which was developed to be thematically related to the Art Gallery. This was debuted in talks and through kiosk co-located with the Art Gallery. We also developed a second juried, online exhibition with a guest curator, "The Urgency of Reality in a Hyper-Connected Age," which was soft-launched at SIGGRAPH Asia as part of our presence there, and will be highlighted at the 2019 conference. At S2018 we coordinated the Art Party at a local gallery, attracting approximately 200 participants. We have arranged for the Art Party to take place on-site at the Art Gallery at S2019, a first in several years, as an effort to bring together a wider group at the conference, and also to reach out to the local digital arts community in LA, and in future with DC. After the conference, we revised our mission statement to include a wider range of computational media arts practices in efforts to reach out to a broader community, and are coordinating with Leonardo LEAF on activities for S2019. We also continued to build the Digital Art Archives project, with the support of ACM. We are currently developing a new online platform for showcasing DAC activities in anticipation of retiring the Ning platform, and are prioritizing social media and outreach for next year. We are a as discussing ways to archive digital arts projects alongside written essays with Leonardo as part of future plans for Art Papers.

## **Diversity and Inclusion Committee (new in 2018)**

Celebrates the diversity that exists within the ACM SIGGRAPH community and provides opportunities, both in-person and year-round, to connect with others with common backgrounds, ethnicities, and gender for mentoring and inspiration. The goal of this committee is to create a welcoming and nurturing community for everyone working in computer graphics and interactive techniques independent of gender, sexual orientation, ethnic background, or abilities.

The Executive Committee recruited Tony Baylis for the role of chair of the Diversity & Inclusion Committee in May of 2018. The role is to provide leadership and guidance for ACM SIGGRAPH to be recognized as an inclusive organization that serves all of its members equally.

## 2018 Goals and Objectives:

- 1. Recruit committee members
- 2. Develop an activity for the SIGGRAPH 2018, 2019 and SIGGRAPH ASIA 2018, 2019 conferences
- 3. Fundraising for SIGGRAPH Diversity and Inclusion efforts
- 4. Create a SIGGRAPH Cares initiative
- 5. Collaborate with other chairs and current efforts at the conferences
- 6. Communicate our efforts to the community and affiliated organizations
- 7. Develop a Mission, Vision, Purpose and goals for our ACM SIGGRAPH Diversity and Inclusion

### **Education Committee**

Works to support educators in computer graphics and interactive techniques. This encompasses both technical, creative, applied and interdisciplinary studies at all post-secondary levels that intersect curricular areas of computer science, engineering, art, design and related disciplines. The Education Committee undertakes a broad range of projects and activities in support of the computer graphics and interactive techniques education community, such as developing curriculum guidelines, providing instructional resources, organizing SIGGRAPH conference-related activities and outreach.

#### **OVERVIEW:**

After a period of restructuring and review of goals, the 2018-2019 programming year saw renewed energy and substantial progress in several major areas:

- Supporting for university educators in VR and administrators adding VR courses to existing programs in the form of workshops, surveys, exemplar courses and instructional materials.
- Coordinating and improving youth outreach to high school and pre-major students wishing to explore graphics as a potential future field.
- Improving access to instructional materials from a variety of existing SIGGRAPH resources by using the Education Committee website as filter based on course or topic.
- Strengthen and broaden the conference experience with the addition of an Educators Theater at the Education Booth in SIGGRAPH Village and a much more sophisticated social media plan.

## ACCOMPLISHMENTS and HIGHLIGHTS:

Specific accomplishments in each of these areas highlights key steps that have been taken to better serve educators:

- (1) To support a growing demand for VR Course, the SIGGRAPH Education Committee increased its efforts to provide VR instructional materials, define VR curriculum, conduct a survey and sponsor VR workshops. A workshop was held at VRCAI 2019 in Tokyo and Birds of a Feather Sessions have been organized for at SIGGRAPH 2018 and again for SIGRAPH 2019. Plans are underway to sponsor fall and spring workshops in the Washington DC Region in preparation for the 2020 Conference.
- (2) Outreach efforts that targeted high school students have been restructured to meet modern best practices and to better coordinate across the entire SIGGRAPH organization. The Pioneer Mentors program is now for students over 18 to explore graphics as a college field of study in a weeklong, one on one experience. High school youth under age 18 have the opportunity to visit the annual conference for a one-day experience in groups if accompanied by adult chaperones, which may apply through the Education Liaison to the Conference Committee.
- (3) A Resources Subcommittee was charged with revising and coordinating access to the many instructional resources available through existing SIGGRAPH repositories including the ACM Digital Library, SIGGRAPH University, conference submission system, and the Faculty Submitted Student Work showcase. The members have been charged with creating "curated lists" by topics that align with curriculum to help educators quickly find the best resources for a course or module.
- (4) A Communications Director position was created to coordinate and promote conference related activities by serving as a primary point of contact to work closely with other leaders within the SIGGRAPH organization and the Conference Committee to manage social media posts, SIGGRAPH Village booth design, organize new speaker events at the Educators Booth, promote networking opportunities and Educator Focused content, the SPACETime student art contests and to coordinate budget across these activities. A pilot Educators Theater is scheduled for SIGGRAPH 2019 to invited exhibitors to give informal, education-focused talks.

## **External Relations**

Elected new Chair, Diana Arellano (replacing Jeff Jortner)

Manages relationships with professional societies and organizations that are external to ACM. Working with the EC this committee identifies and establishes relationships with new organizations according to the current strategic plan.

One of the first tasks was to get a summary and details of all of the external agreements the organization has with various organizations and companies. This helped to see which agreements needed to be renewed soon and on which ones there is room for improvement. This led to conversations with Laval Virtual and FMX on how to improve the agreements. For 2019 the representative at Laval was the E-Tech Chair Courtney Starrett and with her help, a summary of take-aways for future Laval attendance was done.

New for this year is the financial support to attend Laval Virtual (Courtney), as well as to the contributions exchange from Laval and DCAJ. Miho Aoki is part of the External Relations Committee, as liaison between our Japanese partners DCAJ and CG-Arts and ACM SIGGRAPH. She is in charge of the communication between both parties. Finally, the biggest endeavor during the past few months was to explore collaboration opportunities between the Academy Software Foundation (<a href="https://www.aswf.io/">https://www.aswf.io/</a>) and SIGGRAPH / ACM SIGGRAPH.

## **Information Technology Services**

Provides information services support to the ACM SIGGRAPH community. Manages the <u>siggraph.org</u> server infrastructure (software/hardware). Works with the ACM IS team as needed on technical issues for ACM SIGGRAPH and ACM. Responsible for maintaining a database of accounts and email aliases for tracking purposes (both creation and deletion as appropriate).

This year, two efforts stand out above the others. The first is working with the EC and Communications committee on the design and roll-out of the new ACM SIGGRAPH website. Supporting of the previous website had been difficult at times, primarily because of being built in Drupal. The switch to a WordPress based system provides an easier to support platform along with giving us the ability to spread out the support of the site to a wider group as necessary.

The second item has seen a lot of growth this year and it is the use and support of Google Team Drives. Work is being done to migrate all of the current content stored in original Google Drives over to their appropriate Team Drives and verify the correct permissions and people have access.

### **Nominations Committee**

Selects slate for the annual Executive Committee election. Recommends candidates for Chairs of Standing Committees to the Executive Committee.

The Nominations Committee managed applications, conducted interviews, and made recommendations for the following for Chair positions: Diana Arellano (External Relations), June Kim (International Relations Committee), and Victoria Szabo (Digital Arts Community, second term). The EC voted to accept all of these recommendations. Most recently after recommending two individuals for the new Interactive & Immersive Committee Mark Billinghurst was selected as Chair by the EC in late June.

The Nominations Committee also selected the first set of candidates for the EC using the new mini-slate approach with at least two candidates for each of the three director slots. The election will conclude in August 2019.

### **Publications Committee**

Documents the content presented at our sponsored events, using channels that are efficient and cost-effective. Works with ACM Publications Board as new situations arise and on items with broader implications.

Ongoing initiatives include working with the organizers of numerous sponsored events to collect content and prepare the proceedings of their event, working with vendors to prepare physical deliverables for distribution, and working with ACM to import that content into the ACM Digital Library. (Events: SIGGRAPH 2018, SIGGRAPH Asia 2018, and CVMP, VRST, I3D, Digipro, ETRA, SCA, SCF, SAP, and Web3D.) This also includes PACMCGIT, now in its second year / volume.

New / updated initiatives include:

1. Working with conference organizers, program chairs and ACM personnel to rewrite several of ACM's rights management forms to better serve the conferences' needs and

- assisting in the migration of select conference programs' rights management from "permission on acceptance" to "permission on submission."
- 2. Continuing to better the documentation available to authors of works submitted to SIGGRAPH-sponsored events.
- 3. Continuing my role as co-chair of the Conferences Committee of ACM Publications Board.
- 4. In that capacity, working to help test the new proceedings production system (TAPS) for ACM, and working with authors of a few events (Web3D is the first SIGGRAPH event) to use TAPS. It will be the default production system later in 2019 and all of our sponsored events will use it.

## **Specialized Conferences Committee (SCC)**

Approves and monitors specialized conferences to ensure that they are financially and intellectually healthy and aligned with the mission of ACM SIGGRAPH. Promotes awareness of the specialized conferences and the resulting archival content to the broader community and works to improve the integration of the specialized conferences with other SIGGRAPH events. Together with the External Relations Committee, the SCC works to strengthen existing ties and identify new venues, emerging themes or potential relationships with other conferences and organizations to broaden the scope of SIGGRAPH.

This year, the SCC invited TVCG sessions at SIGGRAPH 2019 and SIGGRAPH Asia 2018. Added new conferences as in-cooperation events (IEEE Symposium on AI&VR). Coordinated the approval of PAF and TMRF of over two dozen supported or in-cooperation events. Added CVMP 18 as sponsored event – the 15<sup>th</sup> ACM SIGGRAPH European Conference on Visual Media Production (Although held incooperation for many years, it has now become fully ACM-Sponsored). 16<sup>th</sup> CVMP will happen in London December 2019. Currently working with the Brazilian Computer Society to have Three New Brazilian Conferences as co-sponsored events: SIBGRAPI 2019, SBGames 2019 and SVR 2019, the Brazilian Symposium on VR. Ironing out procedures for making 50% of previous years' surpluses available to sponsored events.

In FY2019, the Specialized Conference Committee approved six sponsored conferences including VRCAI 2018 (Co-located with SIGGRAPH Asia), SAP19, Web3D19, MiG'19, DigiPro'19, as well as six co-sponsored conferences VRST'19 (Co-located with SIGGRAPH Asia), Expressive'19, SCA, UIST, I3D, HPG and 15 in-cooperation (ICAT-EGVE, GRAPP, GI, SPM, SMI, SGP, FMX, CW, CGI, CAD/Comp Graphics 2019, CASA) events. In addition, three conferences co-located with SIGGRAPH 2019, the Digital Production Symposium (DigiPro), EG/ACM SIGGRAPH SCA, and the ACM Web3D).

## **Student Services Committee**

Plan, develop and facilitate activities that integrate students into the ACM SIGGRAPH community. Provide demonstrable value to student members throughout the year.

This year the S3 committee continued to bring additional year round value to ACM SIGGRAPH student members, while broadening our mission to include emerging professionals. S3's mission is to plan, develop, and facilitate activities that assist with integration into the larger SIGGRAPH community and enhance career development. Emerging professionals are defined as undergraduate and graduate students, as well as, those within the first three years' of graduation.

S3 also provides continuity and institutional memory for the student volunteer and intern programs at SIGGRAPH North America and SIGGRAPH Asia and collaborates with other SIGGRAPH entities (conferences, committees, etc.) on issues that affect student and emerging professional members. S3 has four key programs - resume and reel reviews known as S3R3, mentoring for ACM SIGGRAPH student members known as MentorMe, XSV, and a series of webinars and talks.

## **Action Items for the EC:**

- Request: Approval to expand the XSV program for SIGGRAPH Asia.
- Background: XSV program currently runs from September through August on a calendar year to
  take advantage of the North American SIGGRAPH conference volunteer opportunities. The team
  is looking to expand the program for SIGGRAPH Asia, which will run on a different calendar
  cycle and application process. Mentors still need to be identified to have this implemented for
  SIGGRAPH Asia 2019.

## **International Resources Committee**

Elected new Chair, June Kim (replacing Diana Arellano)

Support of the international community of SIGGRAPH through events and activities at the conference, particularly the International Village.

This year the International Resources Committee (IRC) continued working to achieve its two main goals:

## Collaboration

### External:

 To collaborate with other committees – Diversity & Inclusion, Chapters Digital Art Community and Conference committees to share committee members and space to run sessions together.

#### Internal:

To empower all members as all round players and leadership

## **Development of the Culture of International Resources (IRC)**

1<sup>st</sup> IRC workshop at the end of SIGGRAPH 2019:

- To support and encourage team members understanding of committee activities and encouraging active participation.
- To discuss new SIGGRAPH recognition policy

### **History Committee**

Elected New Chair, Mary Whitton.

The History Committee is a group of individuals each of whom has an interest in the history of ACM SIGGRAPH and its activities, artifacts, and community and stories. Their priorities are (1) to preserve the stories and artifacts of our community and industry, and (2) to make the collected materials broadly accessible by the public.

The History Committee was established as a regular standing committee of the EC in 2018. Its charter was updated to include documenting the Impact of SIGGRAPH in development of computer graphics research and the computer graphics industry. This new effort will get underway in FY2020. After a successful pilot activity at S18, the project to record *conversations* between SIGGRAPH notables, e.g.,

Coons Award winners and attendees at the first conference, is improved and expanded for S2019. We are initiating early planning for history related activities at SIGGRAPH's 50<sup>th</sup> conference (2023). Two webbased archives, the ACM SIGGRAPH Art Show Archive and the People Behind the Pixels, added content and improved the robustness of their infrastructures this year. We are interfacing with IT and Online communities in an effort to formalize taxonomy and semantic definitions to support access to SIGGRAPH materials in collections. The projects to archive materials from LA SIGGRAPH (Local Chapter), records from now defunct graphics production companies, and SIGGRAPH Course Notes (not born digital) continued with new deposits of materials made at the Charles Babbage Institute.

#### **Awards Committee**

The Awards Chair is responsible for the oversight of the various awards committee chairs, and the SIGGRAPH academy chair, and for organizing the Awards Luncheon at SIGGRAPH. The Chair is also responsible for coordinating publicity (e.g., making sure the awardees don't tell about their awards before SIGGRAPH has a chance to announce them), and working with contractors on the Awards presentation portion of the SIGGRAPH conference. Finally, the Chair is responsible for ensuring that individual awards chairs follow a reasonable sequence of succession, particularly for ensuring that the rising chair for any committee is known before SIGGRAPH, so that they can be announced, and the retiring chair thanked during the awards ceremony. This particular "chair" assignment is a little idiosyncratic, as there is no specified committee or committee meetings.

### Elected new Chair, John (Spike) Hughes

We have awards selected for this year and announced them publicly. We are in the process of ordering plaques and teapots for the award winners and sending checks to those awardees whose award includes an honorarium.

Planning for the Awards lunch is underway. The awards-lunch invitation list was updated by removing several folks who had remained on it long after they should have been removed (members of the technical awards committee from 8 or 9 years ago, for instance), and adding this year's winners. A more sophisticated spreadsheet has been created which should simplify this process for subsequent years.

## **Advisory boards:**

## **CAFAB:**

Chair: Jason R.M. Smith

In 2018 the Computer Animation Festival Advisory Board was established with the goal to provide a long term vision to the CAF whilst promoting the SIGGRAPH Organization and Conferences through the international Traveling Show.

After defining the group's vision, mission and goals, the Board prioritized and structured its focus around a five-year strategy, delivering on its first two proposals, digital marketing for the Traveling Show and consistent policies for the Animation Festival Awards between SIGGRAPH Asia and North America.

The Board also welcomed Chris Wiggum of PIXAR, who joins as the first of two external advisors for the group.

### Art:

Chair: Mona Kasra

SIGGRAPH ART ADVISORY GROUP (AAG) was established in spring of 2019 to ensure that Art Gallery and Art Papers continue to be valued conference programs serving the artist community and beyond. This newly launched group provides counsel to the Conference Advisory Group (CAG) and SIGGRAPH Asia Conference Advisory Group (SACAG), as needed, on multi-year, cross-conference issues affecting the Art Gallery and Papers community. AAG currently has 11 members (Chair & Exofficio members). Ex-officio members are N-1, N, and N+1 art Gallery and Papers chairs for SIGGRAPH, SIGGRAPH ASIA, and the current chair of the ACM SIGGRAPH Digital Arts Community (DAC). AAG will be adding 2 to 3 appointed members in the near future. AAG primarily dedicated its first group meeting to addressing the Art Gallery jury process and procedures, as requested by the CAG. AAG Chair later compiled the group's recommendations and submitted them to CAG Chair. In the upcoming months, AAG will assemble a document with general suggestions for the structure of Art jury meetings.

### **PAG:**

Chair: Holly Rushmeier

The PAG provided lists of recommended papers chair candidates for SIGGRAPH Asia and SIGGRAPH. The board also responded to various inquiries from the current papers chairs on matters of policy and difficult situations.

### **Key Issues facing ACM SIGGRAPH:**

Continued implementation of the five-year strategy for the organization and conferences. Ensuring that all involved groups are aligned with the five-year strategy.

Volunteer development is a critical issue for all aspects of the organization. We have initiated a new recruitment effort for the organization but it is clear that much more needs to be done to ensure a robust and diverse volunteer base. The jobs have a tendency to grow without bound and we turn to the same volunteers repeatedly.

We are focusing on enumerating and enhancing our member benefits. One key initiative there is mentoring and we are recruiting several new standing committee chairs to work in lifelong learning, professional development, career development for researchers, and career development for practitioners.

We plan to work with the Publications Board to ensure that permissions for our submitted content allow the capture of the maximum amount of content into the digital library in video form and to drive more traffic to the DL rather than author's personal web pages.

## **Appendix:**

Chair regroupings with EC reps:

Career Development: Jessica Hodgins (temporarily)
Early Career Development (formerly S3) – Corinne Price
Research CD -- unfilled
Practitioner CD -- unfilled
Lifelong Learning -- unfilled
Professional Development -- unfilled

Online Communities: Paul Strauss Communications – Barb Helfer History – Mary Whitton Information Technology Services – Aaron Hosier Publications – Stephen Spencer

Focused Communities: Brian Wyvill
Digital Arts – Victoria Szabo
D&I – Tony Baylis
Education – Ginger Alford
Interactive and Immersive Experiences – Mark Billinghurst
International Resources – June Kim
Chapters – Jacky Bibliowicz

External: Paul Kry and Mashhuda Glencross External Relations – Diana Arellano Specialized Conferences – Joaquim Jorge

Chair's Grouping: (Jessica Hodgins and then the Chair going forward)
Awards -- John (Spike) Hughes
Nominations – Rebecca Strzelec