SC18/19 Turnover Report

Committee name: Scientific Visualization Showcase

Names of SC18 Committee members contributing to this report: Kenneth Moreland, Thomas Ertl

Major deadlines and timeline for the year:
- Submissions Open: February 15
- Submissions Closed: August 7
- Reviews Due: September 7
- Decisions Publicized: September 15
- Final Materials Due: October 31

What new did you try in 2018?
- This year we tied the SciVis Showcase submissions to a special issue of *Parallel Computing*. The original intention was to accept papers for all 6 finalists for publication, but later it was decided that another review cycle is needed.

What worked well in 2018 that should be repeated?
- Make the original deadline August 1, but prepare to extend deadline to August 15. This has happened a number of years previously. We had multiple submitters need the extra time.
    - This year we felt pressure to extend only to August 7 to have everything line up for publication in *Parallel Computing*, but that turned out not to be an issue.
    - Consider pushing back the data decisions are publicized to be able to extend deadline.
- Keep the October 31 deadline for the short videos, but signage information (Titles, Authors, Abstracts) should be sent in immediately after reviews are completed.
- Make sure Linklings allows enough space for the videos. We extended the submission to 1.5 Gb.
- Leave a week between when reviews are due and when decisions are publicized to find a good time for the program committee meeting. It's hard to find a time where everyone is available, so it is good to have lots of options. Use an on-line polling tool like Doodle to get availability.
- Consider reaching out to have SC supply a person to interview the six finalists about their visualizations. These can also play on the showcase monitors.
- The AV team did a good job setting up the displays.
- The displays in Houston were in a good place: they were in a high-traffic area and near food service. Explore the space in Denver to find a good location. The last time SC was in Denver (SC17), the showcase was in a disappointing location.
- Make sure to have a good projector in the room for the six finalists' presentations.
- The six finalists each had 15 minutes for their presentations (12 minutes for their presentation + 3 minutes for questions and turnaround). The talks should be a combination of slides and showing their video.
- Base your decision on the winner immediately after presentations and send to the Awards committee. You will need to give the Awards committee a list of the finalists when you have them to let them know the possible winners.
- You will have to practice giving the award. It's easy; all you have to do is to read off a tele prompter.

What did not work well or could be improved?

- The videos continue to increase in quality (which is good), but it is driving down the number of submissions. Even though the quality of the 6 finalists this year was very good, we only had 7 submissions. Authors appear to be self-selecting.
    - A suggestion from last year (that we did not implement): We had a situation in which two professionally produced videos that were designed for explanatory visualization were competed and reviewed against exploratory visualizations. Exploratory visualizations are designed for illuminating research discoveries in a format much closer to the research itself rather than an explanatory format designed to communicate to a broader audience. We recommend having two categories for next year's competition: Explanatory Visualization and Exploratory Visualization. Entrants must choose from one of the categories per submission. They should be competed and reviewed based on criteria in each and explanatory visualizations should not be competed against exploratory visualizations. We believe these formats will expand both pools, potentially enough for two separate tech program presentation slots and draw in more potential submissions from those that professionally produce visualizations to communicate science.
    - Another possibility is to add one (or more) technical awards. For example, perhaps there could be an award for the largest scale visualization.
- So far, the associated *Parallel Computing* publication has not worked out for us. Although we hoped that the carrot would increase the number of submissions, that clearly did not happen. What's worse is that requiring a journal paper in addition to the video itself could actually reduce the number of submissions as authors are already constrained for time. Furthermore, the program committee did not want to discount quality video submissions. Consequently, we recommend separating the showcase submission from the journal submission.
    - In the CFP, state that the finalists will be *invited* to submit to a special issue of *Parallel Computing* (rather than unilaterally saying they will be accepted).
    - For the Showcase submission, reduce the manuscript page length back down to 4 pages. Also, don't bother with formatting it to *Parallel Computing*'s guidelines (as we did this year).
    - Regardless of the quality of the manuscript, all finalists would be invited to submit to a special issue of *Parallel Computing*.
    - The deadline for the submission to *Parallel Computing* should give authors time to write an expanded paper. (Remember, they will be busy with other activities.) We recommend the end of December or later.
    - When *Parallel Computing* submissions come in, assign reviewers from the Showcase program committee. Preferably have those that reviewed the original Showcase submission also review the associated journal paper.
    - Note that this extends the duties of the Showcase chairs as guest editors for several months past SC.

SC18 Call for Participation:

SC18's Scientific Visualization & Data Analytics Showcase provides a forum for the year's most instrumental movies in HPC. Selected entries will be displayed live in a museum/art gallery format. Six accepted finalists will compete for the Best Visualization Award, and each finalist will present his or her movie during a dedicated 15-minute presentation. Movies are judged by overall

quality, how they illuminate science, and for creative innovations in the movie production process.

Accepted submissions will be published in a virtual special issue of *Parallel Computing*. There will also be both a live display throughout the conference so that attendees can experience and enjoy the latest in science and engineering HPC results expressed through state-of-the-art visualization technologies and a session at SC18 dedicated to the accepted submissions.

Review and Selection Process

Submissions need to include a movie (up to 1GB in size) and a short paper (up to 6 pages including references). The short paper should describe the scientific story conveyed by the movie, how the visualization helps scientific discovery, and the "state-of-the-practice" information behind making the movie.

Each submission will be peer reviewed by the Visualization & Data Analytics Showcase Committee. Criteria for review include:

- How effective is the visual communication of the data?
- How relevant to the HPC community is the visualization?
- What is the impact of the science story and how well is it told?
- What visualization techniques were necessary to create the movie?

Finally, submissions should consider SC18's overall theme "HPC Inspires."

Submission Instructions

All submissions comprise a video and accompanying manuscript. The video submitted should be in MP4, MOV, or AVI format and use a codec that will play in typical desktop computer media players. There is no hard limit on video length, but typical videos are less than 10 minutes long, and the submitted file should be no more than 1GB.

The manuscript must be no more than 6 pages including references. The manuscripts should be formatted according to the [guidelines for the *Parallel Computing* journal](). Please use one of the following two templates when formatting your manuscript:

- LaTeX template (preferred): [https://sc18.supercomputing.org/app/uploads/2018/02/sc18-vis-showcase-latex-template.zip]()
- Word template: [https://sc18.supercomputing.org/app/uploads/2018/02/sc18-vis-showcase-template.docx.zip]()

The manuscript should be uploaded as a pdf for the initial submission. Authors of accepted submissions will have to send the original material (.tex or .docx files and any source image files) to *Parallel Computing*'s publisher.

Visualization showcase entries are submitted through the [SC Submission Site](https://submissions.supercomputing.org/) (https://submissions.supercomputing.org/). Sign in, click the "Make a New Submission" tab, and then select the "Scientific Visualization & Data Analytics Showcase" link.

Proceedings

The manuscripts of the six accepted submissions will be published in a special virtual issue of *Parallel Computing*. Because the *Parallel Computing* journal does not have the same publisher as the proceedings of the rest of the SC conference, authors will have to resubmit their content. (There will not, however, be a separate review process.)

Best Visualization

After accepted authors present their work, a select committee will choose among them for the Best Visualization Award. The winner of the Best Visualization Award will be presented during the SC Awards Session.

SC18 Program Committee Members:
1. Daniel Acevedo-Feliz, King Abdullah University of Science and Technology
2. Wes Bethel, Lawrence Berkeley National Laboratory
3. Vetria Byrd, Purdue University
4. Kelly Gaither, University of Texas
5. Joseph A. Insley, Argonne National Laboratory, Northern Illinois University
6. Jens Krueger, University of Duisburg-Essen
7. Torsten W. Kuhlen, RWTH Aachen University
8. Patric Ljung, Linköping University
9. Kenneth Moreland, Sandia National Laboratories
10. John Patchett, Los Alamos National Laboratory
11. Kristi Potter, National Renewable Energy Laboratory
12. Huamin Qu, Hong Kong University of Science and Technology