Practice & Experience in Advanced Research Computing

*Rise of the Machines (Learning)*

**Evaluation Report**

**October 2019**

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EXECUTIVE SUMMARY

The PEARC19 Rise of the Machines (Learning) conference was held July 28-August 1, 2019, at the Hyatt Regency Chicago Hotel in Chicago, Illinois. The third annual Practice & Experience in Advanced Research Computing (PEARC) conference explored current practices and experiences in advanced research computing, including modeling, simulation, and data-intensive computing. Primary foci of the conference were machine learning and artificial intelligence, both of which are proving to be disruptive technologies in a diverse range of scientific fields, from materials science to medicine. This report summarizes results from the PEARC19 evaluation activities.

Summary of Findings

- Across the board, survey respondents rated conference activities highly, with most at or above 4.0 (on a 5.0 scale) in terms of satisfaction and value.
- Across all areas of the conference, communications could be greatly improved.
- PEARC attendees, in general, are seeking diverse and varied content, accompanied by more rigorous selection criteria.
- Qualitative and quantitative data indicated many respondents found the plenary sessions of minimal value. Respondents were roundly critical of the Wednesday morning (Plenary B) session.
- Conference scheduling is problematic for some attendees, in that there is too much content and too many activities to be accommodated within the relatively short conference timeframe.
- Early morning start times, overlapping sessions, and competing priorities leave attendees with a sense of FOMO – fear of missing out.
- Respondents, again, found the two-part submission process confusing, frustrating, and unclear.
- Networking with colleagues was the top reason for attending PEARC19.
- Some attendees believe the conference is too costly, especially with the elimination of breakfast service and additional fees for the off-site social event.
- The emphasis on diversity across all areas of conference programming is applauded but more might be done in this area.
- The registration process and conference websites could be improved in terms of user-friendliness and content.
- Concerns with food and the conference environment included a lack of breakfast, coffee and water, limited hot food options, overcrowded rooms, and a confusing hotel layout.
• Most tutorial participants were satisfied to very satisfied with their experience, but noted crowded rooms, along with the need for longer tutorial sessions and more hands-on experiences.
• The student program and the student-mentor program were generally well received and considered successful by most participants, but improvement could be made in both programs.
• Most exhibitors felt their goals for attending were accomplished and plan to return for PEARC20, but many expressed that the exhibition space was not optimal, that the exhibit schedule should be compressed, and that there should be dedicated times for attendees to interact with exhibitors.

Summary of Recommendations

Participant feedback suggests that the PEARC 19 was generally well received, with major criticisms focused on the plenary sessions, food service, scheduling, and overcrowded session rooms. Respondents offered largely-constructive suggestions aimed at incremental, targeted, and high-level improvements and expansion of existing components. These data inform the following recommendations:

• Continue to broaden participation and promote a sense of community by establishing and deepening relationships with organizations beyond the NSF and the XSEDE project.
• Prioritize timely, clear, and frequent communications with target audiences.
• Increase the transparency and rigor in the content review and selection process.
• Place a priority on offering high-quality, relevant, and non-commercial plenary-session content.
• Consider simplifying the poster-session evaluation rubric.
• Make an effort to reduce schedule conflicts where possible.
• Plan the daily schedule so that conferees feel less rushed and harried; ensure presentation length is sufficient to adequately address content.
• Dispense with the two-part submission process; alternatively, make goals, deadlines, and processes very clear.
• Continue to prioritize networking opportunities and social events.
• Take care to ensure that the conference remains affordable and within reach of all members of the community.
• Continue to expand efforts to increase diversity and representation across all aspects of the conference.
• Seek opportunities to improve the conference web site and maximize its value as a tool to communicate with audiences.
• Continue to improve the overall conference experience by providing varied food options, plentiful water and coffee, and healthy snacks.
• Make efforts to offer longer and/or day-long tutorial sessions and encourage hands-on content; consider increasing the number of tutorials offered and the number of days on which tutorials are offered.
• Make efforts to ensure that tutorial session rooms can adequately accommodate the number of attendees expected, placing those with broad appeal in larger rooms and niche topics appealing to fewer people in smaller rooms.
• Add experience level required and target audiences to tutorial descriptions.
• Continue to offer and expand the student and student-mentor programs, but refine offerings with improved communications and fewer schedule conflicts.
• Optimize placement of exhibitor space to maximize traffic flow and interaction with attendees.
• Consider having dedicated times in the schedule for attendees to visit the exhibition floor.
• Consider compressing the exhibition floor hours, possibly eliminating Thursday hours.
• Provide badge scanners to exhibitors to facilitate follow up with attendees.
• Reimagine the closing awards/luncheon session.
• Reduce the impact of a confusing, multi-level conference hotel by providing a map of the venue to all attendees.
• Reinstitute the practice of providing conference content on a USB drive.
• Conduct the student program evaluation onsite to increase and broaden participation.
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INTRODUCTION

Building on the legacy of the XSEDE conference series and capitalizing on the momentum generated during the PEARC conferences held in 2017 and 2018, the PEARC19 conference, held July 28-August 1, 2019, at the Hyatt Recency Chicago in Chicago, Illinois, showcased the technologies, best practices, challenges, and achievements of those who use, operate, and support advanced research computing resources and services, with an emphasis on academic and open research infrastructure and science.

PEARC19 provided a forum for discussing challenges, opportunities, and solutions among HPC center directors and managers, computational scientists, end users, students, educators, HPC system administrators and user support staff, as well as industry and government agency representatives from across the United States and around the world. The program offered tutorials, workshops, plenary talks, and in-depth technical content that served to inform experts in the field, while also providing introductions to the tools, technologies, and methods of computational science to new users, students, and young professionals.

PEARC19 also continued its dynamic student, student-mentor, and exhibitor programs and diversity efforts, bringing together researchers, technologists, industry professionals, students, and prospective users from underrepresented groups, diverse backgrounds, and new disciplines.

METHOD

Evaluation of the PEARC19 conference consisted of five participant surveys:

- a full-conference survey,
- a tutorial session feedback form,
- a student program survey,
- a student mentor survey, and
- an exhibitor survey.

Tutorial session feedback forms were provided to each tutorial instructor, and participants were asked to return the forms at the end of the tutorial. Copies of the full-conference survey were placed on the luncheon tables at the awards ceremony, the final conference event. Similarly, all registered participants of the exhibitor and student-mentor programs were provided with program surveys at the conclusion of their respective programs during the conference. Participants in the PEARC19 student program were sent e-mail invitations (and multiple email reminders) to participate in the program’s online post-conference survey. With the exception of the student program, all program data was collected onsite at the conference venue.
Respondents

Response rates for PEARC19 conference assessments ranged from 43.5-87.8% (Table 1).

Table 1. Survey response

<table>
<thead>
<tr>
<th>Survey</th>
<th>Number in sample</th>
<th>Number of responses</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full conference</td>
<td>332</td>
<td>243</td>
<td>73.2%</td>
</tr>
<tr>
<td>Tutorials (aggregated)</td>
<td>947</td>
<td>558</td>
<td>58.9%</td>
</tr>
<tr>
<td>Student Program</td>
<td>108</td>
<td>47</td>
<td>43.5%</td>
</tr>
<tr>
<td>Student Mentor Program</td>
<td>49</td>
<td>43</td>
<td>87.8%</td>
</tr>
<tr>
<td>Exhibitor Program</td>
<td>Unknown</td>
<td>47</td>
<td>Undetermined</td>
</tr>
</tbody>
</table>

Many of the respondents to the full conference survey (Table 2) were first-time attendees (34.6%, 84/243), those supporting campus- (51%, 124/243) or federally-funded (32.1%, 78/243) resources, or a member of the Campus Champions organization (25.9%, 63/243). Over one-third of attendees (35.4%, 86/243) represented projects other than NSF-funded XSEDE project. Nearly three-fourths of respondents were comprised of research staff (28.4%, 69/243), research computing operations/support staff (28.8%, 70/243) or those in executive/leadership roles (16.5%, 40/243), followed by university faculty (12.8%, 31/243) and undergraduates (10.3%, 25/243). Most attendees came to network (66.9%, 162/243), attend presentations (54.5%, 132/243), give presentations (42.1%, 102/243) and/or attend tutorials (34.3%, 83/243).

All students who attended the conference were invited to participate in the post-conference student assessment, including those not part of the formal program (Table 3). Nearly 85% of students responding were first-time attendees (84.6%, 33/39) and over half were undergraduate students (53.8%, 21/39). Most students heard about PEARC19 from their faculty advisor (33.3%, 13/39) and/or through their institution (28.2%, 11/39).
Table 2. Full conference survey respondent demographics

<table>
<thead>
<tr>
<th>Job title/Academic status</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
<th>Primary reason(s) for attending the conference</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive leadership (e.g., director, CIO, etc.)</td>
<td>40</td>
<td>16.5%</td>
<td>Make a presentation</td>
<td>102</td>
<td>42.1%</td>
</tr>
<tr>
<td>University faculty or equivalent</td>
<td>31</td>
<td>12.8%</td>
<td>Attend presentations</td>
<td>132</td>
<td>54.5%</td>
</tr>
<tr>
<td>Research Staff</td>
<td>69</td>
<td>28.4%</td>
<td>Attend tutorials</td>
<td>83</td>
<td>34.3%</td>
</tr>
<tr>
<td>Research computing operations/support</td>
<td>70</td>
<td>28.8%</td>
<td>Network with colleagues</td>
<td>162</td>
<td>66.9%</td>
</tr>
<tr>
<td>Postdoctoral Fellow</td>
<td>0</td>
<td>0.0%</td>
<td>Meet with funding agencies</td>
<td>13</td>
<td>5.4%</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>23</td>
<td>9.5%</td>
<td>Attend exhibits/Meet with exhibitors</td>
<td>40</td>
<td>16.5%</td>
</tr>
<tr>
<td>Undergraduate Student</td>
<td>25</td>
<td>10.3%</td>
<td>Get technical information/specifications</td>
<td>49</td>
<td>20.1%</td>
</tr>
<tr>
<td>High School Student</td>
<td>0</td>
<td>0.0%</td>
<td>Demo and/or exhibit projects</td>
<td>13</td>
<td>5.4%</td>
</tr>
<tr>
<td>Corporate/Industry Professional</td>
<td>0</td>
<td>0.0%</td>
<td>Demo products/participate in an exhibit</td>
<td>2</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>3.3%</td>
<td>Other (please specify)</td>
<td>22</td>
<td>9.1%</td>
</tr>
<tr>
<td>No Response</td>
<td>11</td>
<td>4.5%</td>
<td>No response</td>
<td>14</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PEARC relationship</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
<th>Primary program participation</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is my first time attending a PEARC (or XSEDE) conference</td>
<td>84</td>
<td>34.6%</td>
<td>Machine Learning and Artificial Intelligence track</td>
<td>67</td>
<td>27.6%</td>
</tr>
<tr>
<td>I am an XSEDE Campus Champion</td>
<td>63</td>
<td>25.9%</td>
<td>Advanced Research Computing Software &amp; Applications track</td>
<td>87</td>
<td>35.8%</td>
</tr>
<tr>
<td>I operate or support campus research computing resources</td>
<td>124</td>
<td>51.0%</td>
<td>General/Plenaries</td>
<td>106</td>
<td>43.6%</td>
</tr>
<tr>
<td>I support federally-funded research computing resources</td>
<td>78</td>
<td>32.1%</td>
<td>Facilitation of Advanced Research Computing track</td>
<td>106</td>
<td>43.6%</td>
</tr>
<tr>
<td>I support research computing resources funded by other orgs</td>
<td>38</td>
<td>15.6%</td>
<td>Student Program</td>
<td>62</td>
<td>25.5%</td>
</tr>
<tr>
<td>I am part of a cCI organization other than XSEDE</td>
<td>86</td>
<td>35.4%</td>
<td>Workshops</td>
<td>78</td>
<td>32.1%</td>
</tr>
<tr>
<td>No response</td>
<td>23</td>
<td>9.5%</td>
<td>Tutorials</td>
<td>93</td>
<td>38.3%</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>Number of responses</td>
<td>Percentage of N (243)</td>
<td>Gender</td>
<td>Number of responses</td>
<td>Percentage of N (243)</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1</td>
<td>0.4%</td>
<td>Male</td>
<td>160</td>
<td>65.8%</td>
</tr>
<tr>
<td>Asian</td>
<td>46</td>
<td>18.9%</td>
<td>Female</td>
<td>46</td>
<td>18.9%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>14</td>
<td>5.8%</td>
<td>Non-cisgender</td>
<td>14</td>
<td>5.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>8</td>
<td>3.3%</td>
<td>Other</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0</td>
<td>0.0%</td>
<td>Prefer not to disclose/No answer</td>
<td>14</td>
<td>5.8%</td>
</tr>
<tr>
<td>White</td>
<td>151</td>
<td>62.1%</td>
<td>No Response</td>
<td>20</td>
<td>8.2%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.2%</td>
<td>Prefer not to disclose/response</td>
<td>18</td>
<td>7.4%</td>
</tr>
<tr>
<td>No Response</td>
<td>11</td>
<td>4.5%</td>
<td>No Response</td>
<td>11</td>
<td>4.5%</td>
</tr>
</tbody>
</table>
Table 3. Student program survey respondent demographics

<table>
<thead>
<tr>
<th>Primary Conference Track</th>
<th>Number of responses</th>
<th>% of N (39)</th>
<th>How did you hear about the conference?</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Learning and Artificial Intelligence track</td>
<td>7</td>
<td>17.9%</td>
<td>Another conference</td>
<td>2</td>
<td>5.1%</td>
</tr>
<tr>
<td>Advanced Research Computing Software and Applications</td>
<td>8</td>
<td>20.5%</td>
<td>College</td>
<td>11</td>
<td>28.2%</td>
</tr>
<tr>
<td>Facilitation of Advanced Research Computing</td>
<td>9</td>
<td>23.1%</td>
<td>Department</td>
<td>7</td>
<td>17.9%</td>
</tr>
<tr>
<td>Workforce Development and Diversity</td>
<td>2</td>
<td>5.1%</td>
<td>Faculty adviser</td>
<td>13</td>
<td>33.3%</td>
</tr>
<tr>
<td>Tutorials and Workshops</td>
<td>11</td>
<td>28.2%</td>
<td>HPUniversity.org website</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>5.1%</td>
<td>Shodor website</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Consistent with previous PEARC conferences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Conference Survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FINDINGS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Conference Survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| GENERALLY POSITIVE. Respondents to the general conference survey rated the value of conference activities (Table 4) and their satisfaction with the conference (Table 5) highly, with mean value and satisfaction over 4.00 (on a scale of 5.0) in most areas that were evaluated. While the food and beverage offerings, the exhibitor program, and the Tuesday morning plenary session were found lacking some sense, the majority of respondents agreed or strongly agreed that their goals for attending the conference were met (92.5%, 221/239) and that the conference provided a high return on investment (86.2%, 200/232.). Further, many respondents agreed or strongly agreed that presenting at PEARC will enhance their career (147/177, 83%), that they are planning to submit to (189/228, 82.9%), attend (193/233, 82.8%) and/or recommend (221/238, 92.4%) the conference to others in the future.

Consistent with previous PEARC conferences, when attendees were asked about the strengths of PEARC19, respondents lauded the sense of community fostered by the conference through its focus on inclusivity, diversity, and openness to individuals and ideas from outside the HPC community. Some comments include:
• Diverse attendance
• Variety of topics, open to newer author
• The diversity of topics covered, and the intersection of them all
• A place to meet people interested in research computing with no formal CS background
• Very diverse talks, great network opportunities, presence from industry and academia
• The community spirit and the feeling of doing things together
• Bringing the research computing committee together; unique audience

Conference Communications: Across all areas of the conference, qualitative and quantitative data suggest that communications could generally be improved. From students who report they were unaware of the mentor program and modeling competition, to student-volunteers who were unsure of their daily assignments and responsibilities, to student-mentors who felt unprepared to guide their mentees, communications failed to hit the mark. Further, comments indicate that communications regarding changes to the program (i.e., no breakfast, charge for social events) were lacking. Respondents also note that the website could do a better and more timely job in communicating information about speakers and session content. Some comments include:

• Student program was least well described online
• Couldn’t tell breakfast was no longer included for planning - fix.
• Change in conference arrangement needs to be communicated clearly - e.g. the absence of breakfast this year
• Planning information (schedules, etc.) were not available at the time registration was opened
• The poster session judging rubric was much more time consuming than expected and very difficult to evaluate. Also, if that is the criteria to be used, it should be published so students can know what type of content should be included. Student and professional posters should be judged separately.
• USBs with proceedings
• Dedicated PEARC slack channel for attendees to use to communicate, plan social outings, ask questions, and speakers/workshops to use for questions. Stand up a new PEARC20/21/22 channel yearly

Quality of Content, Plenary, and Track Sessions: Most respondents agreed or strongly agreed that knowledge/skills gained would significantly contribute to their work/research (90.7%, 215/237) and that the conference offered an adequate variety of sessions (87.3%, 207/237). Others, however, when responding to how PEARC19 could be improved, commented on the need to expand the breadth of topics offered, improve the quality of papers and rigor in the review process, and the increase technical content. Many were sharply critical of the plenary sessions, especially “Plenary B,” which featured conference exhibitors, with well over one-third of attendees (39.8%, 59/148) expressing that the session was of neutral to no value. Comments include:

• Peer review is weak and variable. Lots of weak papers were accepted. DO NOT PICK a theme for a conference. No BS like machine learned, etc. Keep it simple.
● Release info on the # of papers submitted / # denied. Make paper acceptance criteria more inclusive for a broader representation in the community.
● More rigor on tech papers
● Improve quality of papers
● The tech program could be a little more selective in choosing papers
● Plenaries shouldn’t have been sales pitches
● Wed. plenary was too commercial
● Cloud plenary pitches by Google, MS, Intel were all sales
● Plenary A was way too technical
● Session B was an important topic, but the presentations seemed uneven and a bit straining.
● The plenary talks were waste of time
● The plenary B was more of a recap and advert without any real technical or strategic visionary information
● One cloud presentation (Q23) was ostensibly a sales pitch - let’s not have that again
● Plenary B felt like a lot of companies telling us we in academia shouldn’t be doing what we’re doing, and instead buy their services. Google shouldn’t joke about putting their "best" at ad. optimization
● The Plenary B was pretty self-righteous
● Vendor keynotes were entertaining but not very useful
● Unfortunately, vendor presentations were poor
● Plenary B saved by Microsoft Present
● Plenary Session B was just a sales pitch
● More leadership-class architecture
● Attract more technical content and audience
● More focus on the facilitation track
● More security talks
● More sessions on professionalization, project management, leadership, the "soft" skills. I saw more this year but feel like there could be even more.
● 2+ plenary sessions were too long, stick to 90 minutes
● More practical how-to material
● Please allow larger space for "workforce" or "career" type panels
● Incorporate some lighting talks
● I would like to see more "proof-of-concepts" - for how HPC/AIML has applications across multiple, non-technical disciplines
● Improve advertising and breadth of viz showcase. (too many TACC submissions)

SCHEDULING. Many respondents expressed frustration with competing tracks and activities, early start times, and having to choose between multiple options. Many suggested that presentation times—as well as the conference itself—were not sufficient in length to adequately address all the valuable and much-needed content. Some suggestions to consider include:

● Don’t have too many parallel sessions, I was often interested in more than one happening at the same time! There is already SC for that.
● I would have enjoyed more time for discussion and fewer higher quality accepted submissions
● Too many conflicts for meetings I wanted to attend
• Try to ungroup presentations on similar topics. Several overlapped so you couldn’t see all on one subject
• Room sizes should be adequate for sessions. Reduce too many concurrent tutorials/workshops. Some of them should have had a whole day not half-day.
• Start at 9:00 AM
• The plenary talks were a little too early
• Later start if possible
• Add time on Sunday and Thursday; keep tutorials/workshops week long
• Add a day!
• Focus more on keeping sessions on time
• Less overlapping presentation/events; I’m willing to stay another day

PAPER SUBMISSION. In a majority of cases, respondents agreed or strongly agreed that the submission process was efficient (79.6%, 136/171) and that submission deadlines were reasonable (83.9%, 146/174); however, qualitative data suggests there is still confusion and insufficient communications related to the submission process:

• Deadlines for research mission were too tight
• My submission was waitlisted and cut from a full day to a half day due to a perceived lack of interest. Then was moved >100 ppl signed up but >75 attended.
• Only have one submission deadline
• No 2 phase submission
• Easier submission process

NETWORKING AND BREAKS. Networking with colleagues and meeting others with common interests and challenges was the top reason given for attending PEARC19 as reported by 66.9% (162/24) of respondents (Table 2). Further, over 90% (214/237) of respondents agreed or strongly agreed that the schedule provided enough breaks in the schedule for informal networking (Table 5). Many cited the opportunities for networking as a strength of the conference, while others expressed a desire for even more networking opportunities:

• Most of my time was spent networking, so couldn't attend a lot of sessions
• Many people I needed to interface with also attended
• Would like a networking event like boat at beginning and end. Maybe outing in Portland
• The networking events were fabulous! Need to keep doing them
• More freeform/casual/targeted networking events. Breaks would have been a great opportunity for things like "professional speed dating" w other professionals. Plenaries were too dense. Need less-technical

COST. While most attendees agreed or strongly agreed that for the financial investment made to attend, they were happy with what they had gained (86.2%, 200/232). Others, however, cited that the costs were too high:

• Less costly
• Hotel venue probably too expensive overall. Focus on people, networking, community group building
• Extra charge for networking events was unpleasant surprise!
• For the conference, please don't separate out the "networking" event (White Sox game/Boston tour). It qualifies as "entertainment" so we should not pay for this room NSF - funds. Makes my life more difficult.
• Registration fees are high, for students there was no discount if they didn't do the scholarship

DIVERSITY: A common theme among respondents was *diversity*. Many applauded the ongoing efforts to increase diversity and representation, and signaled the need to continue along this path. When asked about PEARC19’s greatest strengths, as well as how PEARC20 could be strengthened, respondents repeatedly emphasized diversity and its manifestation across all areas of the conference, not only in terms of minority representation, but also in terms of content, attendee background, academic/institutional affiliation, and research interest:

• Plenary sessions need to include more women, POC! Please return a full diversity and Inclusion track. Please review content to represent gender and cultural inclusion, i.e. Moonlanding video and Thursday panel
• Include others beyond NSF; Diverse images + speakers
• This conference covers divergent topics. Please keep it this way
• Women in HPC networking event
• Above ground conference center would be nice. More diversity is critical. The plenaries were dominated by males in advanced positions. More minority representation is needed
• Better organization of Hackathon. Better inclusion for underrepresented groups

REGISTRATION AND CONFERENCE WEBSITE: Respondents were largely positive and in agreement that the online (91.6%, 206/225), and onsite (92.8%, 135/146) registration processes were efficient. However, a number of respondents noted pain points, deficiencies, and areas for improvement in the online registration process, as well as the conference website and schedule:

• Registration for workshops and co-located meetings was confusing. Conference chairs were uncomfortable
• Poster reception and boat ride were very nice. Website seemed clunky. No schedule app
• The registration site only asked if attendees were "interested" in the tutorial, but there were panels at the same time that also conflicted. So 100 signed up, 72 showed up, and only 45 stayed.
• Tutorial time slots and signup were not optimal. We got 100 people signed up for our tutorial and I think that was because only one other tutorial was offered at the same time
• For the conference, please don't separate out the "networking" event (White Sox game/Boat tour). It qualifies as "entertainment" so we should not pay for this room NSF - funds. Makes my life more difficult.

FOOD, BEVERAGE, AND CONFERENCE ENVIRONMENT: While a large majority of attendees agreed or strongly agreed that they were satisfied with the food and beverage provided (73.8%, 177/240), many pointed to the lack of breakfast as a source of frustration. Others expressed a desire for more healthy options during breaks and meals; hot food options at all meals; and greater availability of coffee and water through the day. While some attendees were
critical of vegan options, others expressed their satisfaction with the options provided. Respondents were also largely satisfied with the conference venue and environment, with nearly 86.3% (207/240) agreeing or strongly agreeing that the venue was satisfactory. Small session rooms, resulting in some being turned away; a confusing hotel layout, and crowded, noisy spaces were cited as the chief complaints. Some comments include:

- Include breakfast --- if is a good networking activity besides just a meal
- Breakfast. Most important meal of the day - missing! in 2019
- Please have breakfast at the venue, hard to go out for breakfast and get back in time for plenary at 8:15 (especially for PT Zone). Release the recordings
- I appreciate this venue was more adventurous with food dishes than some previous locations, but I was sad to see no breakfast and reduced snack options
- Food: Non-vegan food was served to vegans
- Dietary needs were difficult. Need breakfast of some sort of fruit.
- I had adverse food reactions all week. I'm always the first to show symptoms from food related issues. Just because I did doesn't mean others did though
- Coffee was hard to find early in the day. Coffee services were well-placed, but no coffee actually present! Food was great at lunch! Breakfast would be good to add
- Vegan option at Awards Lunch was not good Hot food at each lunch! (Hot sandwiches are fine) Something sweet at each lunch
- Have water available during breaks
- More healthy snacks, more consistently at breaks
- Add coffee before plenary sessions
- Good vegan food (Thank you!)
- I was amazed at the food selection for vegans. It really makes a difference when you don't have to worry about food
- Need coffee before plenary sessions
- Hot lunches. Something sweet each break
- Meeting rooms were too small. Couldn't attend some of them. Also, some were musty and caused headaches.
- Some sessions too crowded
- Layout of venue was confusing. Vendors missed an opportunity to provide breakfast.
- Poster session was loud and crowded. Could have benefited from a larger venue. Also drink tickets
- Larger room for panels
- Larger rooms - terrible to pay registration fee and be blocked from sessions
Table 4. Value of conference sessions

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>(1) Not at all valuable</th>
<th>(2) Somewhat valuable</th>
<th>(3) Neutral</th>
<th>(4) Valuable</th>
<th>(5) Very valuable agree</th>
<th>Did not attend/Not applicable/Not answered</th>
<th>Mean value</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Plenary Session A (Tuesday, 8:15am), Panel: Evolving and sustaining the ecosystem of research information technology</td>
<td>169</td>
<td>3</td>
<td>7</td>
<td>26</td>
<td>74</td>
<td>59</td>
<td>74/4.06</td>
<td>4.06</td>
</tr>
<tr>
<td>22. Poster and Visualization Showcase Reception (Tuesday, 6:30pm)</td>
<td>185</td>
<td>1</td>
<td>2</td>
<td>24</td>
<td>98</td>
<td>60</td>
<td>58/4.16</td>
<td>4.16</td>
</tr>
<tr>
<td>23. Plenary Session B (Wednesday, 8:15am): Bhatia (Google), Williamson (Microsoft), and Damkroger (Intel)</td>
<td>148</td>
<td>8</td>
<td>11</td>
<td>40</td>
<td>58</td>
<td>31</td>
<td>95/3.63</td>
<td>3.63</td>
</tr>
<tr>
<td>24. Exhibitors Program (various times throughout the week)</td>
<td>183</td>
<td>3</td>
<td>10</td>
<td>38</td>
<td>88</td>
<td>44</td>
<td>60/3.87</td>
<td>3.87</td>
</tr>
<tr>
<td>25a. Offsite Networking Events (Wednesday evening) River Cruise</td>
<td>132</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>50</td>
<td>72</td>
<td>111/4.45</td>
<td>4.45</td>
</tr>
<tr>
<td>26. Plenary Session C (Thursday, 8:15am) NSF Overview (Kurose), Town Hall (John Towns, et al)</td>
<td>166</td>
<td>0</td>
<td>3</td>
<td>23</td>
<td>68</td>
<td>72</td>
<td>77/4.26</td>
<td>4.26</td>
</tr>
<tr>
<td>27. Awards Lunch (Thursday, 12pm)</td>
<td>212</td>
<td>0</td>
<td>5</td>
<td>37</td>
<td>102</td>
<td>68</td>
<td>31/4.10</td>
<td>4.10</td>
</tr>
</tbody>
</table>

Table 5. Full conference satisfaction

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/Not answered</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The knowledge/skills I gained at PEARC19 will significantly contribute to my work/research.</td>
<td>237</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td>120</td>
<td>95</td>
<td>6/4.28</td>
<td>4.28</td>
</tr>
<tr>
<td>2. The information on the website was adequate for planning my PEARC19 experience</td>
<td>242</td>
<td>1</td>
<td>10</td>
<td>27</td>
<td>116</td>
<td>88</td>
<td>1/4.16</td>
<td>4.16</td>
</tr>
<tr>
<td>3. In general, the conference activities I attended were well organized.</td>
<td>241</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>116</td>
<td>112</td>
<td>2/4.38</td>
<td>4.38</td>
</tr>
<tr>
<td>4. The schedule allowed sufficient time for breaks and informal meetings/networking.</td>
<td>237</td>
<td>3</td>
<td>4</td>
<td>16</td>
<td>104</td>
<td>110</td>
<td>6/4.32</td>
<td>4.32</td>
</tr>
<tr>
<td>5. The submission process was efficient.</td>
<td>171</td>
<td>5</td>
<td>3</td>
<td>27</td>
<td>75</td>
<td>61</td>
<td>72/4.08</td>
<td>4.08</td>
</tr>
<tr>
<td>6. Submission deadlines were reasonable.</td>
<td>174</td>
<td>2</td>
<td>7</td>
<td>19</td>
<td>79</td>
<td>62</td>
<td>69/4.16</td>
<td>4.16</td>
</tr>
<tr>
<td>7. Presenting at PEARC19 will enhance my career.</td>
<td>177</td>
<td>1</td>
<td>2</td>
<td>27</td>
<td>76</td>
<td>71</td>
<td>66/4.21</td>
<td>4.21</td>
</tr>
<tr>
<td>8. I plan to submit to a PEARC conference in the future.</td>
<td>228</td>
<td>3</td>
<td>4</td>
<td>12</td>
<td>94</td>
<td>95</td>
<td>15/4.20</td>
<td>4.20</td>
</tr>
<tr>
<td>9. The conference was well advertised (i.e. website, Facebook,Twitter, etc.)</td>
<td>220</td>
<td>1</td>
<td>7</td>
<td>48</td>
<td>92</td>
<td>72</td>
<td>23/4.03</td>
<td>4.03</td>
</tr>
<tr>
<td>10. The online conference registration process was efficient.</td>
<td>225</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>111</td>
<td>95</td>
<td>18/4.31</td>
<td>4.31</td>
</tr>
<tr>
<td>11. The onsite conference registration process was efficient.</td>
<td>146</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>60</td>
<td>75</td>
<td>97/4.41</td>
<td>4.41</td>
</tr>
<tr>
<td>12. There was an adequate variety of sessions offered during the conference.</td>
<td>237</td>
<td>4</td>
<td>5</td>
<td>58</td>
<td>105</td>
<td>102</td>
<td>6/4.25</td>
<td>4.25</td>
</tr>
<tr>
<td>13. I was satisfied with the food and beverage provided at the conference.</td>
<td>240</td>
<td>6</td>
<td>20</td>
<td>57</td>
<td>89</td>
<td>88</td>
<td>3/3.97</td>
<td>3.97</td>
</tr>
<tr>
<td>14. I was satisfied with the conference venue (location, hotel, meeting rooms, etc.).</td>
<td>240</td>
<td>4</td>
<td>8</td>
<td>81</td>
<td>99</td>
<td>108</td>
<td>3/4.25</td>
<td>4.25</td>
</tr>
<tr>
<td>15. The scheduled social and networking activities helped build credibility among attendees.</td>
<td>209</td>
<td>2</td>
<td>1</td>
<td>29</td>
<td>76</td>
<td>101</td>
<td>34/4.31</td>
<td>4.31</td>
</tr>
<tr>
<td>16. I plan to attend PEARC20 in Portland, OR.</td>
<td>233</td>
<td>5</td>
<td>5</td>
<td>30</td>
<td>73</td>
<td>120</td>
<td>10/4.28</td>
<td>4.28</td>
</tr>
<tr>
<td>17. My goals for attending the conference were achieved.</td>
<td>239</td>
<td>2</td>
<td>2</td>
<td>14</td>
<td>112</td>
<td>109</td>
<td>4/4.36</td>
<td>4.36</td>
</tr>
<tr>
<td>18. For the financial investment I made to attend the conference, I am happy with what I gained.</td>
<td>232</td>
<td>2</td>
<td>5</td>
<td>15</td>
<td>107</td>
<td>95</td>
<td>11/4.22</td>
<td>4.22</td>
</tr>
<tr>
<td>19. I would recommend this conference to my colleagues.</td>
<td>239</td>
<td>2</td>
<td>4</td>
<td>12</td>
<td>95</td>
<td>126</td>
<td>4/4.42</td>
<td>4.42</td>
</tr>
</tbody>
</table>
Tutorials

SATISFACTION. Despite many attendees noting that tutorials were not placed in appropriately sized rooms—some were packed with attendees being turned away, while others were nearly empty—most tutorial participants reported being satisfied to very satisfied with their tutorial experiences. Numerous tutorial participants expressed the need for more full-day and half-day sessions to adequately cover the content, as well as a strong desire for more-hands-on activity and less lecture content. Some tutorial participants noted that tutorial descriptions should reference the skill level required (i.e., advanced, intermediate, beginner) and the target audience (e.g., researcher, support staff, etc.) so that attendees could attend those sessions where they could gain the most benefit. Tutorial comments include:

• I didn't have enough time to execute the commands the instructors were executing (making it less of a tutorial).
• Workshop was great. Hands on was kind of rushed and could use more time.
• It is impossible for me to learn when the presenter is talking constantly, and bombarding me with new information. Without silence, there is no space for thought. I found the tutorials were really frustrating. My recommendation is to allow 25 minutes for what you covered in the first 15 minutes. Talk slower. Make sure people set the Jupyter notebooks up. This part is very unclear. Do a demonstration of it. SLOWLY. Once the student gets that done, everything else is easy. It may be necessary to talk really fast in a class like this, but I probably could only process 30% of the input in real time. It would have been nice to have time to work on problems myself.
• Full disclosure. I am a novice. I found the startup to this tutorial extremely frustrating. Basically we are being told what to type, but without time to understand what it is one is typing. This does not help us do the work with understanding. The introduction should have taken twice as long. The presenter talked very fast with a strong accent. So it was hard to follow instructions, and to understand what was happening. If [the presenter] talked more slowly, I would have been able to follow much better. The time allocation was far too small to do the full workflow in a meaningful way. It seems a lot of thought was put into this, and time. A longer time slot would help. It seems they have never given this tutorial before. I would have liked the hands on exercises to be integrated more with the explanations of the different parallelization methods so I could better understand what was going on behind the scenes.
• This was in no way a beginners tutorial. It might help to be more clear about title. I don't know much about DL so a lot of the talk made no sense.
• Include more speakers, engage more conversations, more hands-on exercises needed
• Would have liked to have had more time for hands-on examples. More details on the syntax for docks and singularity recipe files. Otherwise very good.
• The name and description of the tutorial implied it was for beginners, but there was much info that assumed a lot of experience and knowledge of neural networks. There was no info about how to actually do any programming of DDN's
• Spent too much time on basic questions.
• The discussion fostered by some of the talks was very valuable. I would have appreciated more focus or alignment of the presentations. It was clear that some were aimed at very different audiences - researchers vs. facilitators/support staff

See the tutorials addendum for specific details on individual tutorial, including all respondent comments.
Student Program

Students assessing the overall value of student program sessions (Table 6) were fairly critical, indicating that in many cases student program sessions were of neutral value to not valuable at all. These results are strikingly incongruous with the satisfaction reported by the very small sub-set of students participating the modeling challenge (Table 7) and, to a lesser degree, with the conference itself (Table 8) and the mentor program (Table 9). However, with minimal and inconsistent student response data, it is difficult to determine if these results are anomalous or indicative of larger issues with the program. That said, mean value scores of less than 3.5 (on a 5.0 scale) are worrisome and should be examined more closely in coming years. Some student comments to consider:

- I thought the program was overall really great. There were lots of opportunities to get involved if one wanted to. I wish I could have participated in some more for it, but the actual content of the conference (tutorials and papers) was more important for my research.
- Set more workshops for students and allow ACCS students to participate in
- Involve different career fields which involve programming and other computing skills.
- The PEARC Student Program was excellent! In terms of organizing the volunteers, providing all volunteering assignments the first night would have been great. It was hard to know if I could attend a session the next day not knowing whether or not I was scheduled to volunteer.
- Some of the student events were well-organized, while others had more opportunity for improvement (primarily in terms of providing advance notice and communication). Slack was a great tool, but it felt like it was a Band-Aid on larger gaps in communication or planning. I did appreciate how quick it was to get a response! Very effective tool.
Table 6. Value of student program sessions

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>(1) Not at all valuable</th>
<th>Somewhat valuable</th>
<th>(3) Neutral</th>
<th>(4) Valuable</th>
<th>(5) Very valuable</th>
<th>Not applicable/ Not answered</th>
<th>Mean value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Night Student Welcome Event (Sunday, 5pm)</td>
<td>30</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>3.21</td>
</tr>
<tr>
<td>Hackathon (Sunday/Tuesday, 9pm)</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>34</td>
<td>3.80</td>
</tr>
<tr>
<td>Student-Avatar Dinner (Monday, 6pm)</td>
<td>21</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td>18</td>
<td>4.10</td>
</tr>
<tr>
<td>Plenary Session A (Thursday, 8:15am): AI for Science/Knowledge</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>29</td>
<td>3.10</td>
</tr>
<tr>
<td>and Sustaining the Ecosystem of Research Information Technology Panel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plenary Session B (Wednesday, 8:15am): Bhata (Google), Williamson</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>28</td>
<td>3.09</td>
</tr>
<tr>
<td>(Microsoft), and Diensteger (Freie)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student-Exhibitor Lunch (Wednesday, 12:30pm)</td>
<td>18</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>21</td>
<td>4.06</td>
</tr>
<tr>
<td>Student Modeling Challenge Presentations (Wednesday, 1:30pm)</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>32</td>
<td>3.86</td>
</tr>
<tr>
<td>Poster and Visualization Show Reception (Tuesday, 6:30pm)</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>12</td>
<td>11</td>
<td>9</td>
<td>4.13</td>
</tr>
<tr>
<td>Plenary Session C (Thursday, 8:15am): NSF Update (Kurose, Town Hall)</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>3.67</td>
</tr>
<tr>
<td>Student-Mentor Lunch (Wednesday, 12:30pm)</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>21</td>
<td>4.00</td>
</tr>
<tr>
<td>Offsite Networking Events - River Cruise/White Sox game (Wednesday night)</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>4.00</td>
</tr>
<tr>
<td>Plenary Session D (Tuesday, 12:30pm): NSF Icebreaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student-Exhibitor Speed Networking (Tuesday, 4:30pm)</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>22</td>
<td>3.53</td>
</tr>
<tr>
<td>Student Modeling Challenge Presentations (Wednesday, 1:30pm)</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>32</td>
<td>3.86</td>
</tr>
<tr>
<td>Student Model Mentor Workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student-Exhibitor Lunch (Wednesday, 12:30pm)</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>21</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Table 7. Satisfaction with student program modeling day

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/ Not answered</th>
<th>Mean agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for participating were met.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4.50</td>
</tr>
<tr>
<td>The range of experience of members on my team was balanced.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>The range of interests of members on my team was balanced.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.00</td>
</tr>
<tr>
<td>I felt as though my team was collaborative.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>My team members were supportive of each other during the event.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>I enjoyed the immersive experience of the event.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4.50</td>
</tr>
<tr>
<td>I prefer the immersive experience of the event over traditional</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>conference tutorials.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The set of available questions were interesting to me.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>It was easy to select an interesting question.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>I had enough time to complete my modeling challenge project.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>My programming skills were sufficient for participating in</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>4.25</td>
</tr>
<tr>
<td>this event.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am confident I can incorporate the knowledge/skills gained in</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>4.75</td>
</tr>
<tr>
<td>my work/research.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, I would rate my experience in the event as successful.</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>4.75</td>
</tr>
</tbody>
</table>
Table 8. Student program participants’ overall satisfaction with conference program

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/ Not answered</th>
<th>Mean agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for attending the conference were achieved.</td>
<td>37</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>21</td>
<td>21</td>
<td>2</td>
<td>4.11</td>
</tr>
<tr>
<td>I am interested in doing research involving advanced computing resources.</td>
<td>38</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>14</td>
<td>18</td>
<td>1</td>
<td>4.24</td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the Student Modeling Day.</td>
<td>13</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3.77</td>
<td></td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the tutorials I attended.</td>
<td>29</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>9</td>
<td>4.10</td>
<td></td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the overall conference.</td>
<td>34</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>17</td>
<td>10</td>
<td>4.09</td>
<td></td>
</tr>
<tr>
<td>The student activities I attended were well-organized.</td>
<td>35</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>17</td>
<td>10</td>
<td>4</td>
<td>3.86</td>
</tr>
<tr>
<td>I am interested in doing research involving advanced computing resources.</td>
<td>38</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>16</td>
<td>16</td>
<td>3</td>
<td>3.89</td>
</tr>
<tr>
<td>I connected meaningfully with scientists/researchers who use HPC systems in their work.</td>
<td>38</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td>3.92</td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the Student Modeling Day.</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>17</td>
<td>10</td>
<td>3.46</td>
<td></td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the tutorials I attended.</td>
<td>29</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>17</td>
<td>10</td>
<td>4.10</td>
<td></td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the overall conference.</td>
<td>34</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>17</td>
<td>10</td>
<td>4.09</td>
<td></td>
</tr>
<tr>
<td>The student activities I attended were well-organized.</td>
<td>35</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>17</td>
<td>10</td>
<td>4</td>
<td>3.86</td>
</tr>
<tr>
<td>I enjoyed the format of the student activities.</td>
<td>36</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>16</td>
<td>16</td>
<td>3</td>
<td>3.89</td>
</tr>
<tr>
<td>I connected meaningfully with other students at the conference.</td>
<td>37</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>14</td>
<td>17</td>
<td>2</td>
<td>4.16</td>
</tr>
<tr>
<td>I would recommend this conference to other students.</td>
<td>37</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>16</td>
<td>15</td>
<td>2</td>
<td>4.19</td>
</tr>
<tr>
<td>Overall, I would rate my experience as successful.</td>
<td>38</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>19</td>
<td>13</td>
<td>1</td>
<td>4.13</td>
</tr>
</tbody>
</table>

Table 9. Student satisfaction with student mentor program

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/ Not answered</th>
<th>Mean agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for participation in the student mentor program were met.</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>3.94</td>
</tr>
<tr>
<td>I had enough information to select a mentor that fit my needs.</td>
<td>16</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3.50</td>
</tr>
<tr>
<td>My mentor was knowledgeable and could answer my questions.</td>
<td>18</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>11</td>
<td>1</td>
<td>4.28</td>
</tr>
<tr>
<td>I had enough time to talk to my mentor at the conference.</td>
<td>18</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>9</td>
<td>1</td>
<td>4.28</td>
</tr>
<tr>
<td>I have a plan for keeping in touch with my mentor after the conference.</td>
<td>16</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>3.75</td>
</tr>
<tr>
<td>I would recommend other students participate in the program</td>
<td>17</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>11</td>
<td>2</td>
<td>4.47</td>
</tr>
</tbody>
</table>
Student Mentor Program

Participants who responded to the Student Mentor Survey expressed generally positive attitudes about the Program (Table 10), with most agreeing or strongly agreeing that it was successful in its mission (97.7%, 42/43), and that they would recommend the program to others in the future (97.7%, 42/43). Further, a large majority of mentors (81.4%, 35/43) indicated that they agreed or strongly agreed that they planned to keep in contact with their mentee. Nonetheless, a significant portion of mentors expressed room for improvement in terms of the amount advance guidance provided by program organizers, with over one-third of mentors (34.8%, 15/43) being neutral to in strong disagreement that they had received sufficient guidance to adequately prepare for their role as a mentor. In contrast with those who planned to stay in contact with their mentee, over half of mentors (53.5%, 23/43) indicated they were neutral to in strong disagreement when asked if they were likely to stay in contact with other mentors, with several citing that this was not seen as an intended outcome of the program.

Some comments provided by mentors include:

- There [was] almost no instruction ahead of time. The format was great, it was just strange going in not knowing what to expect.
- There was no forum/time for mentors to connect. Also, the meetings with mentees were scheduled with overlap with other obligations like campus champions meetings. Finally, it would have helped to know that some of the mentees were participating in the hackathon.
- I didn’t really interact with the other mentors, apart from people I had established relationships with. I really like the mentorship program, but I feel that it’s failing to scale with the size of student demand. Quality of interactions between students and mentors is coming down [to] how much each student and mentor “get it” before they come to the conference...I don’t feel we’re doing much to prepare them, or providing enough time for the speed network to be meaningful. Also, scheduling clashes between mentor/mentee time and other events reduced mentor/mentee contact, and made the contact we did have compete with minds wandering to other responsibilities.
- I had an amazingly fulfilling experience and connected with my mentee
- It was my observation that the program was run well and that adequate attention was paid to the pairing process. My mentee and I had similar backgrounds (scientific domain, computing interest).
- Allowing students to meet professionals in their chosen field of study is hugely beneficial.
- I think it’s fantastic that the PEARC program helps get more adult figures into students’ lives that they may not have met otherwise. I feel that every student has the best chance of building a great career when they can compare a vast array of outlooks on work, professional life, and career strategies. In other words, it’s not about matching them with the *right* mentor as much as a lifetime of being matched with *enough different* mentors of high quality.
- Already discussed in person - provide more explicit ground roles for introductions and communications before and at the conference
• Maybe pair the students with the mentors for the duration of the conference? Some students seemed overwhelmed with volunteering and did not get a chance to attend any sessions.
• There could be a mentor database open to students (if mentors are willing to participate) so that students can connect with more professionals
• Note for the organizer of the mentor program: Please understand we are volunteering our time. We all gave extra time to meet the students and we enjoy it. However, mentoring the students is not the only thing we do while at the conference. So, please stop scolding your mentors for things that are sometimes are out of our control. Such as, answering emails on time or being completely on time.

Table 10. Mentor satisfaction with student mentor program

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/ Not answered</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for participation in the mentor program were met</td>
<td>43</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>19</td>
<td>22</td>
<td>0</td>
<td>4.42</td>
</tr>
<tr>
<td>I am satisfied with the mentee/mentor matching process</td>
<td>43</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>10</td>
<td>25</td>
<td>0</td>
<td>4.33</td>
</tr>
<tr>
<td>I had enough time to talk to my mentee at the conference</td>
<td>43</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>24</td>
<td>15</td>
<td>0</td>
<td>4.14</td>
</tr>
<tr>
<td>I engaged meaningfully with my mentee</td>
<td>43</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>17</td>
<td>23</td>
<td>0</td>
<td>4.37</td>
</tr>
<tr>
<td>I plan on keeping in touch with my mentee after the conference</td>
<td>43</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>19</td>
<td>0</td>
<td>4.14</td>
</tr>
<tr>
<td>I engaged meaningfully with other mentor(s) at PEARC</td>
<td>43</td>
<td>3</td>
<td>4</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>0</td>
<td>3.53</td>
</tr>
<tr>
<td>I plan on keeping in contact with other mentors after PEARC</td>
<td>43</td>
<td>2</td>
<td>0</td>
<td>21</td>
<td>14</td>
<td>6</td>
<td>0</td>
<td>3.51</td>
</tr>
<tr>
<td>I was given sufficient guidance from the planning committee to adequately prepare for my mentor role at PEARC</td>
<td>43</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>22</td>
<td>6</td>
<td>0</td>
<td>3.72</td>
</tr>
<tr>
<td>The mentor/mentee program was successful</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>24</td>
<td>18</td>
<td>0</td>
<td>4.40</td>
</tr>
<tr>
<td>I would recommend that others participate in the mentor program in future years</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>16</td>
<td>26</td>
<td>0</td>
<td>4.58</td>
</tr>
</tbody>
</table>
Exhibitor Program

Most who responded to the exhibitor program survey agreed or strongly agreed that the program, in general, met their personal (84.8%, 39/46) and organizational (84.8%, 39/46) goals for participation and that they plan to attend PEARC20 (89.1%, 41/46) (Table 11). Further, most agreed or strongly agreed that PEARC conference attracts a significant number of attendees in their organization’s target audience (88.1%, 41/46), that they engaged sufficiently with these individuals (76.1%, 35/46), and their organization’s investment was worthwhile (87%, 40/46). Still, nearly a quarter of exhibitors (23.9%, 11/46) expressed that they were neutral to in strong disagreement that they engaged significantly with members of their target audiences, and suggest that the exhibitor space should have more optimal placement within the conference center to increase interaction with attendees. Exhibitors also expressed the need for badge scanners to facilitate follow-up with attendees, better communication about logistics, a more compressed schedule, and dedicated times for attendees to visit the exhibition space. Exhibitor comments include:

- Dedicate a time for attendees to talk to exhibitors outside of breaks and lunch
- Last year the show was better organized to maximize table traffic and informal walk-ups. This year the exhibitors are separated from the natural traffic flow, which was less valuable.
- Better placement of vendor area. Felt isolated in basement away from most meeting space. A better method of lead capture, many attendees didn’t have business cards to hand out, being able to scan a badge and get info is helpful
- I was emailing logistics questions early. If you could set up a wiki or blog post with FAQs based on the stuff you know that won’t change year-to-year, [it would] be helpful.
- More compressed exhibitor schedule timed with tutorials, workshops, and BoFs
- Organization - having booth #, floor plan weeks in advance; Communications - last minute changes, unclear plenary timing until week of; Marketing - as sponsors, having networking reception promoted to attendees
- Exhibition area was too isolated from the rest of the conference. Traffic was less than 10% of the attendees.
- Have breaks in vendor areas to have attendees circulate more. A short 2 hour exhibition time on Thursday isn’t ideal. Would prefer to end event on Wed. pm. instead of a 10-12 session on Thursday

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly</th>
<th>N/A/Not answered</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My expectations for exhibiting at PEARC19 were met.</td>
<td>46</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>23</td>
<td>16</td>
<td>1</td>
<td>4.11</td>
</tr>
<tr>
<td>My organization’s expectations for exhibiting at PEARC19 were met.</td>
<td>46</td>
<td>0.0%</td>
<td>8.7%</td>
<td>6.5%</td>
<td>50.0%</td>
<td>34.8%</td>
<td>1</td>
<td>4.13</td>
</tr>
<tr>
<td>The PEARC conference attracts a significant number of attendees in my organization’s target audience.</td>
<td>46</td>
<td>0.0%</td>
<td>4.3%</td>
<td>10.9%</td>
<td>52.2%</td>
<td>32.6%</td>
<td>1</td>
<td>4.13</td>
</tr>
<tr>
<td>I (or others representing my organization) engaged sufficiently with members of our target audience.</td>
<td>46</td>
<td>0.0%</td>
<td>0.0%</td>
<td>10.9%</td>
<td>21.7%</td>
<td>67.4%</td>
<td>1</td>
<td>4.57</td>
</tr>
<tr>
<td>My organization’s investment in PEARC19 was worthwhile.</td>
<td>46</td>
<td>0.0%</td>
<td>4.3%</td>
<td>19.6%</td>
<td>45.7%</td>
<td>30.4%</td>
<td>1</td>
<td>4.02</td>
</tr>
<tr>
<td>My organization is interested in exhibiting at PEARC20.</td>
<td>46</td>
<td>0.0%</td>
<td>0.0%</td>
<td>10.9%</td>
<td>41.3%</td>
<td>48.8%</td>
<td>1</td>
<td>4.37</td>
</tr>
<tr>
<td>My organization would be interested in increasing its support level for PEARC20.</td>
<td>46</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>32.6%</td>
<td>17.4%</td>
<td>1</td>
<td>3.67</td>
</tr>
</tbody>
</table>

Table 11. Exhibitor satisfaction with the conference experience
RECOMMENDATIONS

Participant feedback suggests that the PEARC19 was generally well received. Respondents noted several inconveniences, but offered largely positive comments and thoughtful, measured, and forward-looking suggestions focused on incremental, targeted and high-level improvements and expansion of existing components. Feedback from PEARC19 attendees informs the following recommendations, which may help to further focus and refine the planning of future PEARC conferences:

- Continue efforts to increase diversity across all areas of the conference, not only in terms of minority and gender representation, but also in terms of content, attendee background, academic/institutional affiliation, and research interest. Seek to establish and deepen relationships with organizations beyond the NSF and the XSEDE project, such as the Campus Champions, CARC, CASC, ARCC, and industry partners, as well as members of the NIH, NASA, DoE and DoD communities.

- Prioritize timely, clear, and frequent communications with target audiences. Better use the website and social media channels to ensure that attendees are aware of opportunities and co-located programming, scheduling issues, selection criteria, and session descriptions. Consider a SLACK channel and a schedule app as tools to improve communications with attendees. The formal evaluation process – the primary means of gathering attendee feedback – conducted onsite should extend to the student program, which continues to suffer from incomplete and inconsistent data.

- Seek to offer high-quality, relevant, and non-commercial content, with an increased level of transparency and rigor in the content review and selection process. This is particularly recommended in the selection of plenary sessions speakers. Secure plenary speakers as early in the planning process as possible.

- Early morning start times, overlapping sessions, and competing priorities leave attendees with a sense of FOMO – fear of missing out. Make an effort to reduce schedule conflicts where possible; plan the daily schedule so that conference feel less rushed throughout the day; and ensure presentation length is sufficient to adequately address content. Consider starting an hour later, adding longer sessions for some topics, reducing the number of parallel sessions, allowing additional time for presentation slots, and extending the conference by at least one day. As an interim step to adding days to the conference schedule, consider offering more robust programming on Sunday and/or Thursday, and extending the conference to a full day on Thursday.

- Dispense with the two-part submission process that attendees find frustrating and confusing. Alternatively, clearly define the process and deadlines, and articulate the goals and benefits of a two-part submission process in terms of improving the conference content and attendee experience.

- Continue to prioritize networking by allowing for extended breaks, ad hoc meetings, and formal and informal social activities. Consider reinstituting the inclusion breakfast and an evening social event as part of the conference package as a mean of bolstering networking opportunities for all attendees.

- Take care to ensure that the conference remains affordable and within the reach of all members of the community. Including breakfast and evening social events as part of the standard conference package would likely raise the perceived value relative to the financial commitment required to attend, while making attendance possible to
more members of the community and, generally, increasing networking opportunities.

• Continue to expand efforts toward achieving parity in terms of gender and minority representation across all aspects of the conference, particularly in the very visible plenary sessions.

• Actively seek opportunities to improve the conference website and registration mechanisms. Strive to update the web site with meaningful content on a more frequent basis; incorporate a more user-friendly, interactive mobile site; and use the registration process to more effectively manage tutorial registration and room assignments. To better address room assignment and size issues, emphasize during registration that tutorial selections affect room assignments, and print tutorial selections on name badges. Consider requiring attendance at the tutorial selected during registration.

• Continue to improve the overall conference environment and experience by providing varied food and beverage options—including plentiful water and coffee throughout the day, healthy snacks, and hot foods at each meal—to accommodate all dietary restrictions. Add more visible indications of which foods are vegan, vegetarian, and/or gluten-free. Provide those with dietary requirements more information about how to make special requests and access appropriate food options.

• Make efforts to offer longer and/or day-long tutorial sessions and encourage technical, hands-on (rather than lecture) content for tutorials. Consider increasing the number of tutorials offered and the number of days on which tutorials are offered. Make efforts to ensure that tutorial session rooms can adequately accommodate the number of attendees expected, placing those with broad appeal in larger rooms and niche topics appealing to fewer people in smaller rooms. Add experience level required and target audiences to tutorial descriptions.

• Continue the student and student mentor program, but reevaluate both programs to ensure they are meeting long-term and strategic goals, and with an eye toward increasing the number of qualified students and reducing conflicts between student program activities and the formal conference program. Further, the facilitation of advanced preparation, a better matching process, and post-conference interactions for students and mentors may produce greater, and longer-lasting impacts. Consider establishing an "alumni" network to extend the impact of the program; set expectations for ongoing communication in advance, and, if a goal of the program, provide opportunities for mentor-to-mentor interactions.

• Place the exhibition space to maximize traffic flow and optimize interaction with attendees. Consider having dedicated times in the schedule for attendees to visit the exhibition floor and compressing the exhibition floor hours, possibly eliminating Thursday hours. Provide badge scanners to exhibitors to facilitate follow up with attendees.

• Reduce the impact of a confusing, multi-level conference hotel by providing a map of the venue to all attendees.

• Reinstitute the practice of providing conference content on a USB drive.
APPENDIX

Full Conference Survey

Part I - Overall experience—To what extent do you agree with the following statements regarding PEARC19?

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/Not answered</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The knowledge/skills I gained at PEARC19 will significantly contribute to my work/research.</td>
<td>237</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td>120</td>
<td>95</td>
<td>6</td>
<td>4.28</td>
</tr>
<tr>
<td>2. The information on the website was adequate for planning my PEARC19 experience</td>
<td>242</td>
<td>1.1%</td>
<td>1.3%</td>
<td>7.2%</td>
<td>50.9%</td>
<td>46.1%</td>
<td>0.4%</td>
<td>4.16</td>
</tr>
<tr>
<td>3. In general, the conference activities I attended were well organized.</td>
<td>241</td>
<td>0.4%</td>
<td>4.1%</td>
<td>11.2%</td>
<td>47.9%</td>
<td>36.4%</td>
<td>3.1%</td>
<td>4.38</td>
</tr>
<tr>
<td>4. The schedule allowed sufficient time for breaks and informal meetings/networking.</td>
<td>237</td>
<td>1.3%</td>
<td>1.7%</td>
<td>6.8%</td>
<td>43.9%</td>
<td>46.4%</td>
<td>1.3%</td>
<td>4.32</td>
</tr>
<tr>
<td>5. The submission process was efficient.</td>
<td>171</td>
<td>5</td>
<td>3</td>
<td>27</td>
<td>75</td>
<td>64</td>
<td>5</td>
<td>4.08</td>
</tr>
<tr>
<td>6. Submission deadlines were reasonable.</td>
<td>174</td>
<td>2</td>
<td>7</td>
<td>39</td>
<td>79</td>
<td>67</td>
<td>1.1%</td>
<td>4.16</td>
</tr>
<tr>
<td>7. Presenting at PEARC19 will enhance my career.</td>
<td>177</td>
<td>1</td>
<td>2</td>
<td>27</td>
<td>76</td>
<td>71</td>
<td>0.6%</td>
<td>4.21</td>
</tr>
<tr>
<td>8. I plan to submit to a PEARC conference in the future.</td>
<td>228</td>
<td>1.3%</td>
<td>1.6%</td>
<td>6.4%</td>
<td>32.8%</td>
<td>57.9%</td>
<td>1.3%</td>
<td>4.20</td>
</tr>
<tr>
<td>9. The conference was well advertised (i.e. website, Facebook/Twitter, etc.)</td>
<td>220</td>
<td>6.5%</td>
<td>3.2%</td>
<td>21.8%</td>
<td>41.8%</td>
<td>32.7%</td>
<td>5.5%</td>
<td>4.03</td>
</tr>
<tr>
<td>10. The online conference registration process was efficient.</td>
<td>225</td>
<td>0.3%</td>
<td>0.4%</td>
<td>6.7%</td>
<td>49.3%</td>
<td>42.2%</td>
<td>3.1%</td>
<td>4.31</td>
</tr>
<tr>
<td>11. The onsite conference registration process was efficient.</td>
<td>146</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>60</td>
<td>75</td>
<td>1.4%</td>
<td>4.41</td>
</tr>
<tr>
<td>12. There was an adequate variety of sessions offered during the conference.</td>
<td>237</td>
<td>1.7%</td>
<td>2.1%</td>
<td>8.9%</td>
<td>44.3%</td>
<td>43.0%</td>
<td>1.7%</td>
<td>4.25</td>
</tr>
<tr>
<td>13. I was satisfied with the food and beverage provided at the conference.</td>
<td>240</td>
<td>5</td>
<td>20</td>
<td>37</td>
<td>89</td>
<td>84</td>
<td>2.5%</td>
<td>3.97</td>
</tr>
<tr>
<td>14. I was satisfied with the conference venue (location, hotel, meeting rooms, etc.).</td>
<td>240</td>
<td>4</td>
<td>8</td>
<td>61</td>
<td>99</td>
<td>108</td>
<td>1.7%</td>
<td>4.25</td>
</tr>
<tr>
<td>15. The scheduled social and networking activities helped build camaraderie among attendees.</td>
<td>209</td>
<td>2</td>
<td>1</td>
<td>29</td>
<td>76</td>
<td>101</td>
<td>1.0%</td>
<td>4.31</td>
</tr>
<tr>
<td>16. I plan to attend PEARC20 in Portland, OR.</td>
<td>233</td>
<td>5</td>
<td>5</td>
<td>61</td>
<td>105</td>
<td>102</td>
<td>4.1%</td>
<td>4.28</td>
</tr>
<tr>
<td>17. My goals for attending the conference were achieved.</td>
<td>239</td>
<td>2</td>
<td>2</td>
<td>24</td>
<td>152</td>
<td>109</td>
<td>0.8%</td>
<td>4.36</td>
</tr>
<tr>
<td>18. For the financial investment I made to attend the conference, I am happy with what I gained.</td>
<td>232</td>
<td>2</td>
<td>4</td>
<td>32</td>
<td>95</td>
<td>126</td>
<td>0.5%</td>
<td>4.22</td>
</tr>
</tbody>
</table>

20. If you “strongly disagree” or “disagree” with any of the previous statements, or have additional comments, please explain here:

- Student program was least well described online
- Most of my time was spent networking so couldn't attend a lot of sessions
- Poor fit for my research interests which are more application in science research
- Food: Non-vegan food was served to vegans
- Deadlines for research mission were too tight
- 5. My submission was waitlisted and cut from a full day to a half day due to a perceived lack of interest. Then was moved >100 ppl signed up but >75 attended.
- The rooms were too small and the sessions in them were poorly planned. Should have bigger rooms. Help network event structuring and w/ registration would help.
- Dietary needs were difficult. Need breakfast of some sort of fruit.
- person. We couldn't register a mix of regular attendees and campus champions under a single instance
• A great conference over all
• Couldn't tell breakfast was no longer included for planning - fix. Registration for workshops and co-located meetings was confusing. Conference chairs were uncomfy
• I had adverse food reactions all week. I'm always the first to show symptoms from food related issues. Just because I did doesn't mean others did though
• A lot of the material presented very highly relevant to our work
• Poster reception and boat ride were very nice. Website seemed clunky. No schedule app
• #2: Change in conference arrangement needs to be communicated clearly - e.g. the absence of breakfast this year
• Planning information (schedules, etc.) were not available at the time registration was opened
• Meeting rooms were too small. Couldn't attend some of them. Also, some were musty and caused headaches.
• Good variety of sessions
• Food - personal preference. I prefer to go find my own.
• 8,16: I am a student and I am in my last year. 9: I only knew about the conference room from word of mouth. I don't use social media, so that's probably my fault.
• 15: Coffee was hard to find early in the day. Coffee services were well-placed, but no coffee actually present! Food was great at lunch! Breakfast would be good to add

**Part II: General Conference Activities**

**How valuable were each of the following events to you?**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Plenary Session A (Tuesday, 8:15am), Panel: Evolving and sustaining the ecosystem of research information technology</td>
<td>169</td>
<td>3</td>
<td>7</td>
<td>26</td>
<td>74</td>
<td>59</td>
<td>74</td>
<td>4.06</td>
</tr>
<tr>
<td>22. Poster and Visualization Showcase Reception (Tuesday, 6:30pm)</td>
<td>185</td>
<td>1</td>
<td>2</td>
<td>24</td>
<td>98</td>
<td>60</td>
<td>58</td>
<td>4.16</td>
</tr>
<tr>
<td>23. Plenary Session B (Wednesday, 8:11am): Bhatia (Google), Williamson (Microsoft), and Damkroger (Intel)</td>
<td>148</td>
<td>8</td>
<td>11</td>
<td>40</td>
<td>58</td>
<td>31</td>
<td>95</td>
<td>3.63</td>
</tr>
<tr>
<td>24. Exhibitors Program (various times throughout the week)</td>
<td>183</td>
<td>3</td>
<td>16</td>
<td>38</td>
<td>88</td>
<td>44</td>
<td>60</td>
<td>3.87</td>
</tr>
<tr>
<td>25a. Offsite Networking Events (Wednesday evening) River Cruise</td>
<td>132</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>50</td>
<td>72</td>
<td>111</td>
<td>4.45</td>
</tr>
<tr>
<td>26. Plenary Session C (Thursday, 8:15am): NSF Overview (Kuros), Town Hall (John Towns, et al)</td>
<td>166</td>
<td>0</td>
<td>3</td>
<td>23</td>
<td>68</td>
<td>72</td>
<td>77</td>
<td>4.26</td>
</tr>
<tr>
<td>27. Awards Lunch (Thursday, 12pm)</td>
<td>212</td>
<td>0</td>
<td>5</td>
<td>37</td>
<td>102</td>
<td>68</td>
<td>31</td>
<td>4.10</td>
</tr>
</tbody>
</table>

**28. If you found any of the activities listed above to be “somewhat” or “not at all” valuable, or if you have additional comments about these or other sessions, please explain here:**

• Some sessions too crowded
• Venders were probably better for admins/people needing hardware
• Plenary A was way too technical
• Layout of venue was confusing. Vendors missed an opportunity to provide breakfast.
• Just iffy
• Session B was an important topic, but the presentations seemed uneven and a bit straining.
• The plenary talks were waste of time
• Microsoft presentation was more like a small talk
• The plenary B was more of a recap and advert without any real technical or strategic visionary information
• The exhibits accomplished the goal of allowing sponsors to showcase, wasn't useful. I'd rather meet without vendor interference, including a plenary devoted to marketing talks
• Nothing wrong with it - I was just here to understand the various technologies better
• VIS/POSTEN showcases are favorites each year. Unique venue that encourages much more engagement than visuals
• Breadth and depth
• One cloud presentation (Q23) was ostensibly a sales pitch - let's not have that again
• Exhbitors - I didn't talk to any, but seeing some unfamiliar names was useful
• Poster session was loud and crowded. Could have benefited from a larger venue. Also drink tickets
• Vegan option at Awards Lunch was not good
• Plenaries shouldn't have been sales pitches
• Wed. plenary was too commercial
• Cloud plenary pitches by Google, MS, Intel were all sales
• More sessions on how to run/manage a group of CI professionals would be helpful
• Would be nice to hear from other entities/institutions, etc. - not just funding a genius.
• Plenary B felt like a lot of companies telling us we in academia shouldn't be doing what we're doing, and instead buy their services. Google shouldn't joke about putting their "best" at ad. optimization
• The Plenary B was pretty self-righteous
• It was very unclear how to become involved in the institution future.
• Vendor keynotes were entertaining but not very useful
• Unfortunately, vendor presentations were poor
• Not interested in exhibits
• Would like a networking event like boat at beginning and end. Maybe outing in Portland
• For me, "somewhat valuable" is more valuable than "neutral"
• Plenary B saved by Microsoft Present
• Plenary Session B was just a sales pitch
• Need coffee before plenary sessions

29. What were the strengths of the PEARC19 conference?

• Networking, quality of presentation
• The networking w/ individuals w/ so much experience
• Many people I needed to interface with also attended
• Great size, friendly community, great networking events, awesome healthy/vegetarian meal options, nice location
• Variety
• The Attendees
• Networking, presentations
• Co-related activities for student program was great
• Large number of variety in the sessions ... that were high quality
• Great group of attendees, all sharing highly relevant experiences and work that is directly applicable to my research computing roles
• Clearly community driven
• This is the single best venue for professionals in academic computing staff like myself
• Breadth of knowledge sharing for Research computing
• Networking
• Organization above all
• The attendees/networking opportunities
• The people
• Lots of things to do within walking distance of hotel
• Networking
• Peer networking
• Networking; topic set
• Student program, education sessions, good size (# of participants)
• The people
• Great variety of sessions, good networking opportunities
• Bringing the Research Computing committee together; Unique audience
• Variety of topics birth focus on ARC support
• Breadth I suppose
• Networking + Presentations!
• Papers and tutorials were great, particularly student submissions.
• Good connections of adult and young alike
• Strong student program
• The amount of vendors
• Very student friendly and extremely well organized
• Exhibit hall was very useful
• Good organizing - Great team - Friendly environment
• Submission/review cycle well organized. Attendance there but not overwhelming. Maintained an informal atmosphere
• Networking
• The people
• Networking with collaborators
• Variety of topics, open to newer author
• Well organized, breadth of tech program, outstanding plenary sessions
• Excellent student program. Good networking opportunities.
• Breadth of attendees
• Networking opportunities
• The community spirit and the feeling of doing things together
• Seeing people, love of the talks
• Venue, workshops, locations
• The people/volunteers, Hackathon was a great experience
• Great accommodations
• The diversity of topics covered, and the intersection of them all
• A place to meet people interested in research computing with no formal CS background
• Very diverse talks, great network opportunities, presence from industry and academia
• Wide Variety
• The ability to network with others and definitely the student programs!
• Great speakers
• Balance of "free time" and sessions
• VIS Showcase, POSTEN, Data Science/Education Talks
• Interactions with fellow researchers and CI staff
• Variety of organizations represented, not too large
• Variety of topics, networking with peers, PANELS
• Building Community! Solving Problems, Planning the future
• Seeing all of my XSEDE colleagues, some of which I would not see in person anywhere else.
• Networking
• Presenting new development in the community
• Talked about HPC and Research computing
• Community
• Tutorials - Many people who do work similar to mine 2. Diversity in applications and approaches to perspectives 3. Good pave of events 4. Inclusion of visualization
• Increased variety and breadth, but that also means too many overlapping presentation and events
• Diversity of high quality CI presentations
• Meeting collaborators face to face
• Interdisciplinary
• Wifi
• The networking
• Student program
• Great group of people; more experience/practice
• Production experience of major supercomputing center along with their development
• Good technical sessions and variety
• Community ties, quality program
• Networking; state holder facing
• well attended and organized
• The multidisciplinary reviews of why research helped me gain new insight towards my research
• broader than XSEDE
• Seeing people / collaboration opportunities
• Strong technical program, food networking opportunities
• Workshops/tutorials
• Workshops were excellent and good format
• I find lots of people working in the same field
• Friendly, approachable
• Diverse attendance
• Community and show info
• Presentation by research CI leaders like Rick Stevens
• Student program
• Networking
• Great content - well organized
• Chicago, Kim Bergeron and team, hotel, committee, food, and more.
• Networking, seeing tools, and projects at other sites.
• I was amazed at the food selection for vegans. It really makes a difference when you don’t have to worry about food
• The only conference dedicated to research computing
• Community sharing common goods around CI
• Networking
• I found the workshops and tutorials I attended very educational
• As a grad student who also tries to make a connection between high performance computing and deep learning, I found this conference diversive with convening what I was looking for
• Diverse research
• Hearing what others have done
• Internet worked this time around :)
• Very well organized, stimulating, and useful. Schedule, venue, and food were all outstanding
• Networking, idea exchange, collaboration
• The networking events were fabulous! need to keep doing them
• Good vegan food (Thank you!)
• Enjoyed meeting new people with similar work and also meeting other students
• Networking with peers / social events / venue
• Good location
• The practical vs theoretical balance of the program was good
• People, good presentations, students presenting, River Cruise was a good idea, vendors avail but not overpowering
• Meeting people
• Breadth of topics, research-facing-related panels/presentations
• AI/ML
• Opportunities for networking, good overview of HPC ecosystem
• Meeting people
• Networking, sharing of information
• Well organized
• More interesting conference compared to previous years. Great location, good size
• Variety of sessions/topics
• Networking
• Networking, F2F time
• Network, community, technical content
• Networking and getting to know the recent advances in the Advanced Research Computing
• Variety
• Workforce development. Networking. Diversity topics
• Student program, mentor program, variety of activities
• Number of students - good mix!
• I think the networking and knowledge that was given
• Networking events, tutorials
• Connecting with people, seeing/hearing what is happening in the community
• Gathering practitioners/evangelists and users of CI. More practical than SC. Here and now focuses at core
• Small group sizes made it easy to interact with others
• Student program!
• There were a large variety of different talks
• Well organized. Lots of diverse attendees.
• Networking
• Networking, presentations about system details, and research center policies and procedures
• It is a good place to meet professionals and academics from all around the United States
• Good focus for presentation with less distractions as compared to SC
• Good variety and exposure to different HPC and research topics, (exp. Module learning. Good platform for user group mtgs.)
• Networking and student mentoring
• The focus on people/"intellectual capital' in support of research is huge!
• Really liked workforce/diversity sessions. Enjoyed student sessions. The mentor/mentee program was wonderful
• Diversity and student participation
• A unique cross-over of NSF, etc. Computing/infrastructure professionals.
• Technical sessions, paper talks
• Meeting people who do similar jobs at other institutions. BoFs - these are great. Campus Champion events
• The people there
• Variety of presentations and breadth of locations and experience of presenters
• Strong Academic Computing and Support Focus in track, talks, paper, and tutorials

30. What improvements would you suggest for next year’s PEARC20 conference?

• The poster session judging rubric was much more time consuming than expected and very difficult to evaluate. Also, if that is the criteria to be used, it should be published so students can know what type of content should be included. Student and professional posters should be judged separately.
• Dr. Pepper
• Add a day!
• Bigger Venue
• More applications (not software)
• Increased focus on student program; The recognition for all committee members, not just chairs, committee member gathering for small subset of members is insulting
• Larger venue
• 2+ plenary sessions were too long, stick to 90 minutes
• Better traffic to sessions. Better matching of session to room site
• Probably time for a larger venue. Better coordination between panel and BoF programs.
• More meat options at lunch
• The plenary talks were a little too early
• Better criteria or choosing best papa and best poster award
• Speed networking event should be slightly longer for each rotation. 2 minutes is too short
• Larger rooms
• More of the same
• More education events
• Breakfast (w/ protein options), Hotel was a bit too cold/mildewy
• More cowbell
• Tutorial time slots and signup were not optimal. We got 100 people signed up for our tutorial and I think that was because only one other tutorial was offered at the same time
• Speed networking did not go well. Neither students or exhibitors enjoyed the 2 min. limit. I got yelled at after some of my most valuable and important conversations for taking too long.
• More tutorials throughout the week. When possible, less overlapping in a related trash.
• More things for students
• The food
• A stand-up mentor lunch. Where everybody can meet more than one person.
• Better speed networking session, better tutorials.
• Review poster, I found this to be unusable
• Add a few more sessions on growing CE careers
• Room size evaluation
• More space
• Poster scoring rubric was too long, confusing and must be completely overhauled.
• Peer review is weak and variable. Lots of weak papers were accepted. DO NOT PICK a theme for a conference. No BS like machine learned, etc. Keep it simple.
• Breakfast
• Larger rooms for meetings/sessions
• Keynotes at lunch or evening
• What about more international aspects? Putting together (in few sessions) people from several continents.
• Better way access paper abstracts during conference.
• Assignment of locations for student programs (Basement location not the best to navigate or interact)
• More sessions on professionalization, project management, leadership, the "soft" skills. I saw more this year but feel like there could be even more.
• Mainstreaming the events better
• I am not invited in this field, so I don't know
• Maybe really separate the tutorial sessions (e.g. have the first 2 days entirely for tutorials) and the next days only talks
• More "intro to" perhaps. As a school rep whose university is just starting to get involved, it's hard to know where to start
• Organization/communication with volunteers sooner. Women in HPC networking event?
• As a journalist, the red dot system didn't allow me to take pictures of large crowds. I suggest an exception for the media.
• I am on the "academic" side - not the sysadmin side and thoro was not as much for me. I am probably in the minority
• Easier-to-navigate venue
• Community; Find a mechanism to "match" room size with community interest in the topics. Many rooms were undersized
• More room for attendees so registration doesn't close
• Better capacity planning (several colleagues expressed they have been turned away from packed rooms sessions)
• Bring back breakfast! Charging for the social event was a factor in many people not going
• Start at 9:00 AM
• More space for tutorials
• Case study - transitioning HPC in the cloud
• Larger rooms
• Same information on both sides of badges, so they can't flip to a blank side (for different lanyards) 2. More power outlets for laptops
• Less overlapping presentation/events; I'm willing to stay another day
• Focus more on keeping sessions on time
• Breakfast. Most important meal of the day - missing! in 2019
• Better food
• More security talks
• Address room crowding
• Only have one submission deadline
• Include breakfast --- if is a good networking activity besides just a meal
• no 2 phase submission
• larger room for panels
• less conflictive content
• More sessions for workforce development and for education in this space
• larger rooms - terrible to pay registration fee and be blocked from sessions
• more on project management
• Liked the domain-oriented presentations and would like to see more
• More topics in tutorials and workshops
• spread out the hands on workshop to multiple days
• Ask presenters that any video be captioned. Vetted captions, not YouTube auto captions. " rooms too small for interest, particularly for sessions targeting senior level people
• More tutorials and workshops
• Non parallel workshop
• Room layout was confusing. Try to find locations that have fewer levels in building
• Food
• Larger rooms - especially for CL discussions
• Please include breakfast!
• More Ca RCC. More diverse speakers and sessions. (business side of operations, diverse community)
• More focus on the facilitation track
• Above ground conference center would be nice. More diversity is critical. The plenaries were dominated by males in advanced positions. More minority representation is needed
• Start Monday pm, not am. And end Friday am, not Thurs. pm
• Better program format for easy browsing and finding presentations of interest
• Many of the sessions I attended had talk, I felt had very little to do with the advertised topic. Block chain in AI session and Cyber Security in Data science. It was hard to navigate the talks
• A larger portion of science topic?
• Dedicated PEARC slack channel for attendees to use to communicate, plan social outings, ask questions, and speakers/workshops to use for questions. Stand up a new PEARC20/21/22 channel yrly
• Larger rooms, esp. for all the non-tech / careers / meta panels
• Bring back PEEQ! so disappointed that it was rejected it was standing room only
• Create a "my schedule" app
• Need more time to talk in speed networking. I had many really good interactions but we were let off
• Attract more technical content and audience
• Provide map or floor level for meeting rooms in the small program
• Really stress student involvement even more
• Many interesting current topics
• Larger rooms to prevent being turned away from specific popular panels/presentations
• 20 min presentations
• Room sizes should be adequate for sessions. Reduce too many concurrent tutorials/workshops. Some of them should have had a whole day not half-day
• Choose a different format for closing awards
• Better meeting rooms. Need desserts Please include whole or 2% milk w/ my coffee
• Larger rooms for the popular sessions
• Meeting room sizes (need to be bigger)
• Please have breakfast at the venue, hard to go out for breakfast and get back in time for plenary at 8:15 (especially for PT Zone). Release the recordings
• More leadership-class architecture
• Better audio for accessibility reasons. Some speakers used no mic
• Hotel venue probably too expensive overall. Focus on people, networking, community group building
• Printout of conference map of event/senior locations
• Better hotel and food
• Offsite Networking event(s) should be a single large reception type event that is not expensive, not sight-seeing type of event
• Include a map of meeting rooms
• More power outlets in rooms
• Poster judging rubric needs attention. Doesn't make sense for a lot of the posters (i.e. workflow development)
• More practical how-to material
• Hot food at each lunch! (Hot sandwiches are fine) Something sweet at each lunch
• Hot lunches. Something sweet each break
• Incorporate some lighting talks
• More centralized layout especially exhibit booths
• Have water available during breaks
• I would like to see more "proof-of-concepts" - for how HPC/AI/ML has applications across multiple, non-technical disciplines
• Better organization of Hackathon. Better inclusion for underrepresented groups
• More healthy snacks, more consistently at breaks
• Add coffee before plenary sessions
• Opportunity to meet students to talk to them about job opportunities. I think there was a student job fair but this was limited to exhibitors
• Better map and venue
• Try to ungroup presentations on similar topics. Several overlapped so you couldn't see all on one subject
• Maps
31. How would you like to see the PEARC conference series change or develop in the future?

- More thematic sessions
- Too many conflicts for meetings I wanted to attend
- Increase in vendor support of the student program, and greater collaboration on activities w/ schedule
- I think the program has the right mix of content and options
- Engage broader community (DOE, NSIL, etc.)
- Continue.
- Provide maps or give site to find maps
- It is going great thus far
- Build on being more inclusive of other CI/HPC communities, e.g.: DOE, DOD, NASA, etc.
- More rigor on tech papers
- Bigger education program for teachers like the old SC Education Program
- The registration site only asked if attendees were “interested” in the tutorial, but there were panels at the same time that also conflicted. So 100 signed up, 72 showed up, and only 45 stayed.
- Expand beyond the US (not very well known in Canada)
- More for students
- Better the speed networking and find people that are hiring
- Tutorials could be much better
- Stay small scale and informal (we have SC for big and formal!) Stay focused on infrastructure and the people who support it.
- Keep the community building spirit a little bit more of technical tracks.
- The conference has to continue to have XSEDE focus a become more general in its activities and leadership. This will happen as the conference becomes more involved with ACM.
- GROW!!
- I hope the Hackathon grows!
- Invite the people who maintain good software so that all attendees can learn about the best practices. Example: Software computing/cookie writer/etc.
- More meaningful tutorials (ex: walking through a tutorial with no additional insight beyond the text already there is not helpful)
- Women in HPC networking event
- Keep doing what you’re doing
- I would like to see more on the details of the scientific computation
- Don’t turn into SC
- Sysadmin track
- I was very much enjoying the overall schedule and structure has remained consistent for all the years I have attended and changes have taken place without altering the overall conference structure
- Hackathons, not just for students
- Would love to see the PEEQ event from PEARC18 back, since that was super helpful
- Nothing to add
- Scientific applications
- Add time on Sunday and Thursday; keep tutorials/workshops week long
- easier submission process
• Involve more students
• less costly
• Better focus
• Don’t change
• Programming workshops for HPC is valuable
• Please return a full diversity and Inclusion track. Please review content to represent gender and cultural inclusion. i.e. Moonlanding video and Thursday panel
• Include others beyond NSF; Diverse images + speakers
• See above
• More freeform/casual/targeted networking events. Breaks would have been a great opportunity for things like "professional speed dating" w other professionals. Plenaries were too dense. Need less-technical
• Don’t have too many parallel sessions, I was often interested in more than one happening at the same time! There is already SC for that.
• I would have enjoyed more time for discussion and fewer higher quality accepted submissions
• This conference covers dersive topics. Please keep it this way
• As. 30
• Please allow larger space for "workforce" or "career" type panels
• More consistent staff year to year to keep institutional knowledge and consistently. Governing board
• Let’s focus our efforts on how we can advocate for science in the current political environment / use our work for public good
• Develop!!! On right track
• Keep focused on quality of presentations, attracting students and their input and learning
• Its’c close to perfect
• Keep focus on academic computation and data support and needs
• Keep going as you are!
• Current trend is good
• Improve advertising and breadth of viz showcase. (too many TACC submissions)
• Don’t get too big
• More parallel tracks if you can make them available for afterwards. If not, this is great!!
• Later AM start
• Need intern program devel assistance - contribute, build projects on limited budget, colocate additional meetings in addition to XSEDE management type
• More students!
• It would be cool to do other research computing topics
• More technical tutorials
• Plenary sessions need to include more women, POC!
• More info on what's happening in the research community.
• Enlarge to 1,000 Participants. More CI professional development.
• The tech program could be a little more selective in choosing papers
• Maybe some mentoring or direct assistance with student/newbies
• Venue should support traffic to vendors. Breaks were all over this year so it did not promote traffic past vendor
• I hope materials are available post-conference
• Increase focus on data and data facilities. For most problems in research, compute/network is worthless without data
• Improve quality of papers
• More BoFs - or not have multiple BoFs at the same time
• More promotion of student competitions
• Later start if possible

32. In which conference event(s) did you primarily participate? Please select all that apply.

<table>
<thead>
<tr>
<th>Primarily program participation</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Learning and Artificial Intelligence track</td>
<td>67</td>
<td>27.6%</td>
</tr>
<tr>
<td>Advanced Research Computing Software and Applications track</td>
<td>87</td>
<td>35.8%</td>
</tr>
<tr>
<td>General/Plenaries</td>
<td>106</td>
<td>43.6%</td>
</tr>
<tr>
<td>Facilitation of Advanced Research Computing track</td>
<td>106</td>
<td>43.6%</td>
</tr>
<tr>
<td>Student Program</td>
<td>62</td>
<td>25.5%</td>
</tr>
<tr>
<td>Workshops</td>
<td>78</td>
<td>32.1%</td>
</tr>
<tr>
<td>Tutorials</td>
<td>93</td>
<td>38.3%</td>
</tr>
<tr>
<td>Workforce Development and Diversity track</td>
<td>66</td>
<td>27.2%</td>
</tr>
<tr>
<td>No Response</td>
<td>14</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

33. Mark all of the following statements that apply to you:

<table>
<thead>
<tr>
<th>PEARC relationship</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is my first time attending a PEARC (or XSEDE) conference</td>
<td>84</td>
<td>34.6%</td>
</tr>
<tr>
<td>I am an XSEDE Campus Champion</td>
<td>63</td>
<td>25.9%</td>
</tr>
<tr>
<td>I operate or support campus research computing resources</td>
<td>124</td>
<td>51.0%</td>
</tr>
<tr>
<td>I operate or support federally-funded research computing resources</td>
<td>78</td>
<td>32.1%</td>
</tr>
<tr>
<td>I support research computing resources funded by some other organization</td>
<td>38</td>
<td>15.6%</td>
</tr>
<tr>
<td>I am part of a cyberinfrastructure organization other than XSEDE</td>
<td>86</td>
<td>35.4%</td>
</tr>
<tr>
<td>No response</td>
<td>23</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

34. Did you stay at the conference hotel - Hyatt Regency Chicago?

<table>
<thead>
<tr>
<th>Stayed at conference hotel?</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>205</td>
<td>84.4%</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>10.3%</td>
</tr>
<tr>
<td>No response</td>
<td>13</td>
<td>5.3%</td>
</tr>
</tbody>
</table>
35. What were your primary reason(s) for attending the conference? (Select only two options)

<table>
<thead>
<tr>
<th>Primary reason(s) for attending the conference</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make a presentation</td>
<td>102</td>
<td>42.1%</td>
</tr>
<tr>
<td>Attend presentations</td>
<td>132</td>
<td>54.5%</td>
</tr>
<tr>
<td>Attend tutorials</td>
<td>83</td>
<td>34.3%</td>
</tr>
<tr>
<td>Network with colleagues</td>
<td>162</td>
<td>66.9%</td>
</tr>
<tr>
<td>Meet with funding agencies</td>
<td>13</td>
<td>5.4%</td>
</tr>
<tr>
<td>Attend exhibits/Meet with exhibitors</td>
<td>40</td>
<td>16.5%</td>
</tr>
<tr>
<td>Get technical information/specifications</td>
<td>49</td>
<td>20.2%</td>
</tr>
<tr>
<td>Demo and/or exhibit projects</td>
<td>13</td>
<td>5.4%</td>
</tr>
<tr>
<td>Demo products/participate in an exhibit</td>
<td>2</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>22</td>
<td>9.1%</td>
</tr>
<tr>
<td>No response</td>
<td>14</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Other responses:

- (unexpected, but most valuable) finding career information, learning about US-RSE, talking to people who facilitate scientific computing with no CS framing
- Advanced Computing for Social Change
- Advanced Computing for Social Change
- community duty
- Cover as a journalist
- Give a tutorial
- Hackathon
- Lead the SGCI Hackathon
- Participate in student program
- Remit students
- Report/write on key talks/presentations
- Student Hackathon
- Student Program
- Support REU students
- Support students that were presenting
36. Job title/Academic status (Please elect all that apply.)

<table>
<thead>
<tr>
<th>Job title/academic status</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive leadership (e.g., director, CIO, etc.)</td>
<td>40</td>
<td>16.5%</td>
</tr>
<tr>
<td>University faculty or equivalent</td>
<td>11</td>
<td>12.8%</td>
</tr>
<tr>
<td>Research Staff</td>
<td>69</td>
<td>28.4%</td>
</tr>
<tr>
<td>Research computing operations/support</td>
<td>70</td>
<td>28.8%</td>
</tr>
<tr>
<td>Postdoctoral Fellow</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>23</td>
<td>9.5%</td>
</tr>
<tr>
<td>Undergraduate Student</td>
<td>25</td>
<td>10.3%</td>
</tr>
<tr>
<td>High School Student</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Corporate/Industry Professional</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>3.3%</td>
</tr>
<tr>
<td>No Response</td>
<td>11</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Other responses:

- HPC support
- Independent Consultant
- Media/journalist
- Nonprofit Staff
- Research Software Engineer
- Science writer
- Software Developer for RCC - not HPC yet
- System Administrator

37. Race/ethnicity (Please select all that apply.)

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Asian</td>
<td>46</td>
<td>18.9%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>14</td>
<td>5.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>8</td>
<td>3.3%</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>White</td>
<td>151</td>
<td>62.1%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.2%</td>
</tr>
<tr>
<td>Prefer not to disclose/response</td>
<td>18</td>
<td>7.4%</td>
</tr>
<tr>
<td>No Response</td>
<td>11</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Other responses:

- Middle eastern
- Jewish
- European
38. Gender (Please select all that apply.)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of responses</th>
<th>Percentage of N (243)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>160</td>
<td>65.8%</td>
</tr>
<tr>
<td>Female</td>
<td>46</td>
<td>18.9%</td>
</tr>
<tr>
<td>Non-cisgender</td>
<td>3</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Prefer not to disclose/No answer</td>
<td>14</td>
<td>5.8%</td>
</tr>
<tr>
<td>No response</td>
<td>20</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

39. Please note any additional comments you would like to make regarding PEARC19

- An open activity to all the committee members as they spend lots of time and need to feel appreciated
- Awesome job - thank you!
- Better food please
- Did not like the hotel: too confusing, nickle and dimed for normal amenities (i.e. $25 for a fridge)
- Engage more undergraduate students
- Enjoyed the boat tour and the city
- Extra charge for networking events was unpleasant surprise!
- Food - good labeling wrt vegan, …: not carbs or organic
- For the conference, please don’t separate out the “networking” event (White Sox game/Boston tour). It qualifies as “entertainment’ so we should not pay for this room NSF - funds. Makes my life more difficult.
- Good Job!
- Great conference, looking forward to next year!
- Great efforts, let’s keep improving this conference. Big kudos to logistics for steering committee.
- Great experience
- Great Job - Always impressive
- Great job guys!
- Great job!
- Have coffee available before first talks in the morning? Great conference!
- I appreciate this venue was more adventurous with food dishes than some previous locations, but I was sad to see no breakfast and reduced snack options
- I really enjoyed this conference
- It’d be great to have a full day tutorial next year, all attendees would benefit, but I’m not sure there will be space.
- Keep supporting students!
- Keep up the good work of organizing such a great conference
- Many thanks!
- More time for facilitation focused tutorials and workshops
- Need discussion on sustainability. Align with SC conference and others. Don’t repeat the announcement that funding has increased for super com. centers.
- Nice job! To the whole committee!
- Not enough time to get around
Overall good conference
Really enjoyed the conference overall and can’t wait for PEARC 20
Registration fees are high, for students there was no discount if they didn’t do the scholarship
Release info on the # of papers submitted / # denied. Make paper acceptance criteria more inclusive and broad for a broader representation in the community.
Thank you to everyone who makes the student program possible. It is incredible! Great for professional development and everyone is friendly and encouraging. I look forward to PEARC all year and it did not disappoint! Thank you.
Thank you, you guys are awesome!
Thank you! Another great experience
Thanks for the wonderful conference
Thanks to hardworking organizers. Some posters seemed to be of poor content. Coffee available before morning events!!
Thanks!!
The best one of the three years
This was very educational and enjoyable. Thanks for the hard work!!
USB’s with proceedings
Vegan options great except sit down lunch had veggie plate
Well organized and good amount of diversity in the hands of BOF’s organized! The student program was great as well!
## Student Program Survey

1. **How valuable to you were each of the following sessions and activities?**

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>(1) Not at all valuable</th>
<th>Somewhat valuable</th>
<th>(3) Neutral</th>
<th>(4) Valuable</th>
<th>(5) Very valuable</th>
<th>Not applicable/ Not answered</th>
<th>Mean value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Night Student Welcome Event (Sunday, 5pm)</td>
<td>30</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>3.23</td>
</tr>
<tr>
<td>Hackathon (Sunday-Tuesday, 9pm)</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>3.80</td>
</tr>
<tr>
<td>Student-Mentor Dinner (Monday, 6pm)</td>
<td>21</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td></td>
<td>4.10</td>
</tr>
<tr>
<td>Plenary Session A (Tuesday, 8:15am): AI for Science/Evolving and Sustaining the Ecosystem of Research Information Technology Panel</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td>3.10</td>
</tr>
<tr>
<td>Student Modeling Challenge (Tuesday, 11am-5pm)</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
<td>4.00</td>
</tr>
<tr>
<td>Student-Exhibitor Speed Networking (Tuesday, 4-30pm)</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td></td>
<td>3.53</td>
</tr>
<tr>
<td>Poster and Visualization Showcase Reception (Tuesday, 6:30pm)</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>12</td>
<td>11</td>
<td></td>
<td>4.13</td>
</tr>
<tr>
<td>Plenary Session B (Wednesday, 8:15am): Bhattacharjee (Google), Williamson (Microsoft), and Damkroger (Intel)</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
<td>3.09</td>
</tr>
<tr>
<td>Student-Mentor Lunch (Wednesday, 12:30pm)</td>
<td>18</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td></td>
<td>4.06</td>
</tr>
<tr>
<td>Student Modeling Challenge Presentations (Wednesday, 1:30pm)</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td>3.86</td>
</tr>
<tr>
<td>Offsite Networking Events - River Cruise/White Sox game (Wednesday evening)</td>
<td>18</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td></td>
<td>4.00</td>
</tr>
<tr>
<td>Plenary Session C (Thursday, 8:15am): NSF Update (Kurosav), Town Hall (John Towns, et al)</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
<td>3.67</td>
</tr>
<tr>
<td>Awards Lunch (Thursday, 12:00pm)</td>
<td>18</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td></td>
<td>3.44</td>
</tr>
</tbody>
</table>

2. **If you selected "not at all" or "somewhat" valuable, please explain here.**

- N/A
- I was not matched with a mentor. Some events were at times when I was already scheduled for something else.
- I didn't participate in any of the papers/modeling challenge/hackathon.
- The awards lunch was alright -- just wouldn't consider it necessarily valuable.
- My only notable feedback on the student events is in regards to the Speed Networking event. It got very chaotic as students were not following the indicated route to change tables, and it seemed like most of the exhibitors were only interested in / under the impression they should be giving resume feedback, which I personally did not need. It seemed like it was aimed at students who had never held a job before and/or students who were only interested in one type of employment/role. I think because what I'm interested in is primarily academic and real-world research solutions, most of the industry professionals in attendance didn't respond to my resume or elevator pitch, even though they acknowledged it was polished and I clearly knew what I was doing.
- The most value I got out of this event was pitching the poster I was presenting later in the evening instead of my resume, and two of the exhibitors came by later, listened to my research project summary, and then gave me their business cards to 'keep in touch.'
• I do not think that the "hackathon" and the "modeling challenge" were explained/communicated well. I also heard similar feelings from other students, including those that attended each event. "Hack" has a negative connotation; and while I know that the PEARC planners did not design any devious activities, the term betrayed the meaning of what was truly happening at the "hackathon." Had more details about the "hackathon" been clearly communicated, I would have liked to have attended. Posters are always a difficult thing, because so rarely do their designers dedicate the time and quality to make them visually and simply appealing. This is improving with the help of the "new poster design," (which a few participants implemented) though that design is not visually appealing, and overly simple. But participants could probably be helped if PEARC provided some example posters of "excellent quality designs from past PEARC conferences" to encourage their creative thinking. The visualization TV screens as part of the poster room were an excellent addition! The networking event was not well organized. Several changes should be made:

1. More communication to students about the procedures, as well as which companies will be represented. I assumed that many of the PEARC vendors would be there (which turned out to be correct), but I did not know for sure, and I did not know who else would be there. If students are genuinely seeking a job, they need to know who to expect to be talking to in order to prepare specialized/printed materials to hand out.

2. The vendors should be informed of the procedures/rules of the event also. If they were, I certainly could not discern this from interacting with them.

3. Two minutes is too short. Many of the vendors themselves were getting frustrated with the PEARC planners for the fact that, if they got to speak to a student they actually wanted to consider hiring, they were forcefully rushed away before any meaningful conversation could ensue.

4. Using rectangular tables in a clear arrangement could facilitate order of procedure. This year, round tables were scattered throughout the room, which communicates "no order" to everyone, so students were trying to bounce between tables as they saw fit, much to the disapproval of the organizers. I suggest putting tables only around the perimeter of the room, which communicates a more linear order of procedure.

5. There is no need for every student to visit every table. This could be a waste of time for the students and the vendors, when they are highly unmatched. Communicate the represented parties/vendors to the students in advance, and let the students only visit those vendors they actually want to.

• The welcome event was honestly a little bit boring, and it basically was all about the people in the committee and although they were supposed to be giving advice I think most of them were boasting about their achievement and how to never give up when that is not practical advice.

• As a student, the plenary session B was just Intel, Google and Microsoft selling themselves on how they are the future, which was not interesting. I didn't want to attend a sales pitch.

3. What improvements would you suggest for the PEARC Student Program?

• The student volunteer schedule came out as a Google spreadsheet between midnight and 1 AM, even though there were volunteer events starting at 7:45 AM or 8 AM that morning. This happened every single day. Please fix this. If the response from the scheduling team is that we students didn't turn in our requested hours to them, make sure they understand that's totally meaningless. It is EASIER to make a schedule when we haven't given you our preferences, than it is to figure out a schedule that matches everyone's preferences.
Better match/design for mentor and students would be appreciated. Match on direction/field would be good.

The student volunteer session was a waste of time for the student. A session chair is more than capable of doing a head count and collecting surveys. This took away my opportunity to attend talks that I came here for.

NA

More communication earlier on before the conference.

More organization (practice timing and rotation flow) for speed networking and provide a more or less accurate list of confirmed schools, organizations etc.

I think it was a very good organized and can’t be better than that. Thank you so much for the Students Committee.

Extending the time per rotation in the speed networking event would be nice. Two minutes is very short, given how the students inevitably fail to rotate correctly. Even just another 1 or 2 minutes would be beneficial.

Options outside of papers/modeling challenge and Hack-a-thon.

It was really nice to be connected with a mentor. I hope I can receive feedback from the judges about my posters though there were a lot of visitors that offered great suggestions.

Set more workshops for students and allow ACCS students to participate in

The student program was great. I don’t think I have any big suggestions. The speed networking event was very valuable but 2 minutes was not long enough. There was an overwhelming consensus on this from both exhibitors and students.

Clearer directions for the poster program (the assumption that our supervisors will direct us is not necessarily the case - it wasn’t for me); Some kind of access to presentation materials for workshops/talks we can’t attend due to conflicting volunteer shift; Volunteer shifts scheduled farther in advance (some shifts were posted around 11pm the night before, even for 8am shifts); More downtime! I may be alone in this, but I’m an introvert with severe anxiety (Tbh I have an assistive animal I should have brought with me, I needed more recharge time than just sleep.

I would suggest maybe a social event rather than an “orientation” type of event for the students. I thought the introductions weren’t really beneficial.

The PEARC Student Program was excellent! In terms of organizing the volunteers, providing all volunteering assignments the first night would have been great. It was hard to know if I could attend a session the next day not knowing whether or not I was scheduled to volunteer.

Probably giving more explanations on what each event was because I did not know what the plenary sessions and probably making the hackathon later in the day

See previous comments; basically, more communication about what each event actually entails.

Involve different career fields which involve programming and other computing skills.

It was run very well

I was a student volunteer at XSEDE16 and I think at that time there was a real up-close personal focus helping every student get the most out of the experience. This time it felt more like they just wanted to get through everything without issues.

I thought the program was overall really great. There were lots of opportunities to get involved if one wanted to. I wish I could have participated in some more for it, but the actual content of the conference (tutorials and papers) was more important for my research.
• More interaction with the mentors, being able to find our own data
• I had a great time as a participant in the PEARC Student Program. The mentors and Hackathon sponsors were awesome and very helpful to the teams.

4. Did you participate in the Student Modeling Day?

• Yes 4/39, 10.3%
• No, but considered 18/39, 46.2%
• No, and did not consider 12/39, 30.8%
• No, I didn’t know about it 5/39, 12.8%

5. Please indicate to what extent you agree with the following statements regarding your experience in the PEARC Student Modeling Day?

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/Not answered</th>
<th>Mean agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for participating were met.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.50</td>
</tr>
<tr>
<td>The range of experience of members on my team was balanced.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>The range of interests of members on my team was balanced.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.00</td>
</tr>
<tr>
<td>I felt as though my team was collaborative.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>My team members were supportive of each other during the event.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>I enjoyed the immersive experience of the event.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>I prefer the immersive experience of the event over traditional conference tutorials.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.50</td>
</tr>
<tr>
<td>The set of available questions were interesting to me.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>It was easy to select an interesting question.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>I had enough time to complete my modeling challenge project.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>My programming skills were sufficient for participating in this event.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.25</td>
</tr>
<tr>
<td>I am confident I can incorporate the knowledge/skills gained in my work/research.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.75</td>
</tr>
<tr>
<td>Overall, I would rate my experience in the event as successful.</td>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
<td>50.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2</td>
<td>4.75</td>
</tr>
</tbody>
</table>

6. If you disagree or strongly disagree with any of the statements above, please explain here.

• No comments
7. Did you participate in the Student Mentor Program?

- Yes 19/39, 48.7%
- No, but considered 7/39, 17.9%
- No, and did not consider 6/39, 15.4%
- No, I didn’t know about 7/39, 17.9%

8. To what extent do you agree with the following statements regarding your experience in the Student Mentor Program at the conference?

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/ Not answered</th>
<th>Mean agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for participation in the student mentor program were met.</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>3.94</td>
</tr>
<tr>
<td>I had enough information to select a mentor that fits my needs.</td>
<td>16</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3.50</td>
</tr>
<tr>
<td>My mentor was knowledgeable and could answer my questions.</td>
<td>18</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4.28</td>
</tr>
<tr>
<td>I had enough time to talk to my mentor at the conference.</td>
<td>18</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>9</td>
<td>1</td>
<td>4.28</td>
</tr>
<tr>
<td>I have a plan for keeping in touch with my mentor after the conference.</td>
<td>16</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>3.75</td>
</tr>
<tr>
<td>I would recommend their students participate in the program</td>
<td>17</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>4.47</td>
</tr>
</tbody>
</table>

9. If you disagree or strongly disagree with any of the statements above, please explain here.

- There might need a better way to get the match. Or a group communication rather than pair instead. Or have a limit on who can apply to be a mentor.
- I did not sign up for this event and somehow I was paired with a mentor.
- The mentoring program is wonderful! Thanks for connecting us with professionals and making the conference more social by organizing networking.
10. To what extent do you agree with the following statements regarding your overall experience at the conference?

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/Not answered</th>
<th>Mean agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for attending the conference were achieved.</td>
<td>37</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>21</td>
<td>11</td>
<td>2</td>
<td>4.11</td>
</tr>
<tr>
<td>I am interested in doing research involving advanced computing resources.</td>
<td>38</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>14</td>
<td>18</td>
<td>1</td>
<td>4.42</td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the Student Modeling Day.</td>
<td>13</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>13</td>
<td>3.77</td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the tutorials I attended.</td>
<td>29</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>15</td>
<td>9</td>
<td>10</td>
<td>4.10</td>
</tr>
<tr>
<td>My background knowledge and skills were a sufficient foundation for participation in the overall conference.</td>
<td>34</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>17</td>
<td>10</td>
<td>5</td>
<td>4.09</td>
</tr>
<tr>
<td>The student activities I attended were well-organized.</td>
<td>35</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>17</td>
<td>10</td>
<td>4</td>
<td>3.86</td>
</tr>
<tr>
<td>I enjoyed the format of the student activities.</td>
<td>36</td>
<td>3.4%</td>
<td>6.9%</td>
<td>24.1%</td>
<td>55.2%</td>
<td>34.5%</td>
<td>3</td>
<td>3.89</td>
</tr>
<tr>
<td>I connected meaningfully with scientists/researchers who use HPC systems in their work.</td>
<td>38</td>
<td>3.3%</td>
<td>10.0%</td>
<td>23.3%</td>
<td>46.7%</td>
<td>43.3%</td>
<td>1</td>
<td>3.92</td>
</tr>
<tr>
<td>I connected meaningfully with other students at the conference.</td>
<td>37</td>
<td>3.4%</td>
<td>10.3%</td>
<td>6.9%</td>
<td>48.3%</td>
<td>58.6%</td>
<td>2</td>
<td>4.16</td>
</tr>
<tr>
<td>I would recommend this conference to other students.</td>
<td>37</td>
<td>3.3%</td>
<td>0.0%</td>
<td>16.7%</td>
<td>53.3%</td>
<td>50.0%</td>
<td>2</td>
<td>4.19</td>
</tr>
<tr>
<td>Overall, I would rate my experience as successful.</td>
<td>38</td>
<td>3.3%</td>
<td>0.0%</td>
<td>16.7%</td>
<td>63.3%</td>
<td>41.3%</td>
<td>1</td>
<td>4.13</td>
</tr>
</tbody>
</table>

11. If you disagree or strongly disagree with any of the statements above, please explain here.

- The student volunteer track seemed really disorganized
- Not interested in doing research. More of a system administrator.
- Some of the student events were well-organized, while others had more opportunity for improvement (primarily in terms of providing advance notice and communication). Slack was a great tool, but it felt like it was a Band-Aid on larger gaps in communication or planning. I did appreciate how quick it was to get a response! Very effective tool.
- Already mentioned in the last comment.

12. Which PEARC19 presentations did you enjoy most and why?

- A few technical papers that are relevant to biological background
- I liked the talk about whether to use Python or R because it was extremely easy to follow
- Papers because they were short and to the point. If I enjoyed I could do research on my own time.
- Yes, I enjoyed the most of it because I was able to used tools that I never use before and learned my struggle.
- I really enjoyed attending student paper presentations. There were a variety of topics to learn about!
- I really enjoyed the mentor and networking events because I enjoyed meeting new people in different fields and learning things from a different point of view
- The initial python tutorial ("Introduction to Python for Scientific Computing") was excellent because the presenter used a python notebook that I could keep, and showed real examples of things I might actually want to do with python. Too often,
tutorials stay at the "for loop, create arrays" level, which is easy to learn from google. What I want to see (and did, in this case) are examples of how to do some real science, which will stimulate my thinking.

- Novel Pruning Method, it was a fascinating piece of research
- I was at ACSC so I did not attend most of the presentations.
- NSF plans for future XSEDE resources; Distributed deep learning tutorial; Various domain-science talks
- I don't have a specific one in mind, but it was great to see different projects and HPC environments.
- I enjoyed the Jetstream Openstack presentation most. My summers,Äô work as an intern with the Ohio Supercomputer Center was integrating Openstack with Open OnDemand. I could relate closely to the topics the host were speaking on.

13. How did you hear about the conference? (select all that apply)

<table>
<thead>
<tr>
<th>How did you hear about the conference?</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another conference</td>
<td>2</td>
<td>5.1%</td>
</tr>
<tr>
<td>College</td>
<td>11</td>
<td>28.2%</td>
</tr>
<tr>
<td>Department</td>
<td>7</td>
<td>17.9%</td>
</tr>
<tr>
<td>Faculty advisor</td>
<td>13</td>
<td>33.3%</td>
</tr>
<tr>
<td>HPCUniversity.org website</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Shodor website</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Student organization</td>
<td>4</td>
<td>10.3%</td>
</tr>
<tr>
<td>XSEDE website, event, and/or training</td>
<td>7</td>
<td>17.9%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>3</td>
<td>7.7%</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Other responses:

- Undergrad Research program
- TACC
- Friend

14. In addition to the student program, in which conference track did you primarily participate?

<table>
<thead>
<tr>
<th>Primary Conference Track</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine Learning and Artificial Intelligence track</td>
<td>7</td>
<td>17.9%</td>
</tr>
<tr>
<td>Advanced Research Computing Software and Applications</td>
<td>8</td>
<td>20.5%</td>
</tr>
<tr>
<td>Facilitation of Advanced Research Computing</td>
<td>9</td>
<td>23.1%</td>
</tr>
<tr>
<td>Workforce Development and Diversity</td>
<td>2</td>
<td>5.1%</td>
</tr>
<tr>
<td>Tutorials and Workshops</td>
<td>11</td>
<td>28.2%</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>5.1%</td>
</tr>
</tbody>
</table>
15. Please select all of the following statements that apply to you.

<table>
<thead>
<tr>
<th>PEARC relationship</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is my first time attending an PEARC conference.</td>
<td>33</td>
<td>84.6%</td>
</tr>
<tr>
<td>I use XSEDE resources for my research/work.</td>
<td>8</td>
<td>20.5%</td>
</tr>
<tr>
<td>I attended as part of a REU</td>
<td>4</td>
<td>10.3%</td>
</tr>
<tr>
<td>I am part of Adv. Computing for Social Change Prog.</td>
<td>7</td>
<td>17.9%</td>
</tr>
<tr>
<td>I am an XSEDE Scholar.</td>
<td>2</td>
<td>5.1%</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

16. Academic status

<table>
<thead>
<tr>
<th>Job title/Academic status</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postdoctoral Fellow</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>16</td>
<td>41.0%</td>
</tr>
<tr>
<td>Undergraduate Student</td>
<td>21</td>
<td>53.8%</td>
</tr>
<tr>
<td>High School Student</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Other responses: [None]

17. Race/ethnicity (select all that apply)

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>9</td>
<td>23.1%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>5</td>
<td>12.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>5</td>
<td>12.8%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>3</td>
<td>7.7%</td>
</tr>
<tr>
<td>White</td>
<td>14</td>
<td>35.9%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Prefer not to disclose/not response</td>
<td>6</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

Other responses: [None]

18. Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>21</td>
<td>53.8%</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>33.3%</td>
</tr>
<tr>
<td>Non-cisgender</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Prefer not to disclose/ No answer</td>
<td>5</td>
<td>12.8%</td>
</tr>
</tbody>
</table>
19. What is the highest level of education achieved by your parent and/or guardian?

<table>
<thead>
<tr>
<th>Parent/guardian level of education</th>
<th>Number of responses</th>
<th>% of N (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's degree</td>
<td>9</td>
<td>23.1%</td>
</tr>
<tr>
<td>Master's degree</td>
<td>9</td>
<td>23.1%</td>
</tr>
<tr>
<td>High school or less</td>
<td>6</td>
<td>15.4%</td>
</tr>
<tr>
<td>Some college</td>
<td>5</td>
<td>12.8%</td>
</tr>
<tr>
<td>PhD</td>
<td>4</td>
<td>10.3%</td>
</tr>
<tr>
<td>Associate's (two-year) degree</td>
<td>3</td>
<td>7.7%</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>5.1%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Professional doctoral degree (e.g., MD, JD, EdD, DMD)</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Student Mentor Survey

1. To what extent do you agree with the following statements regarding your role as a mentor at PEARC?

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly disagree</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly agree</th>
<th>Not applicable/Not answered</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My goals for participation in the mentor program were met</td>
<td>43</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>19</td>
<td>22</td>
<td>0</td>
<td>4.42</td>
</tr>
<tr>
<td>I am satisfied with the mentee/mentor matching process</td>
<td>43</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>10</td>
<td>25</td>
<td>0</td>
<td>4.33</td>
</tr>
<tr>
<td>I had enough time to talk to my mentee at the conference</td>
<td>43</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>14</td>
<td>15</td>
<td>0</td>
<td>4.14</td>
</tr>
<tr>
<td>I engaged meaningfully with my mentee</td>
<td>43</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>17</td>
<td>23</td>
<td>0</td>
<td>4.37</td>
</tr>
<tr>
<td>I plan on keeping in touch with my mentee after the conference</td>
<td>43</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>16</td>
<td>19</td>
<td>0</td>
<td>4.14</td>
</tr>
<tr>
<td>I engaged meaningfully with other mentor(s) at PEARC</td>
<td>43</td>
<td>3</td>
<td>4</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>0</td>
<td>3.53</td>
</tr>
<tr>
<td>I plan on keeping in contact with other mentors after PEARC</td>
<td>43</td>
<td>2</td>
<td>0</td>
<td>21</td>
<td>14</td>
<td>6</td>
<td>0</td>
<td>3.51</td>
</tr>
<tr>
<td>I was given sufficient guidance from the planning committee to adequately prepare for my mentor role at PEARC</td>
<td>43</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>12</td>
<td>6</td>
<td>0</td>
<td>3.72</td>
</tr>
<tr>
<td>The mentor/mentee program was successful</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>24</td>
<td>18</td>
<td>0</td>
<td>4.40</td>
</tr>
<tr>
<td>I would recommend that others participate in the mentor program in future years</td>
<td>43</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>16</td>
<td>26</td>
<td>0</td>
<td>4.58</td>
</tr>
</tbody>
</table>

2. If you disagreed or strongly disagreed with any of the statements above, please explain.

- I know quite a few of the other mentors but I did not meet anyone new so it was hard to say "meaningful."
- Always I want to motivate students and help them to learn from the opportunities there are for them.
- I only spoke with my assigned mentee for a couple of minutes
- The diner environment and the food were great but too noisy so it was hard to talk to my mentee
- I did not realize that other mentors were available as a resource.
- There [was] almost no instruction ahead of time. The format was great, it was just strange going in not knowing what to expect.
- There was no forum/time for mentors to connect. Also, the meetings with mentees were scheduled with overlap with other obligations like campus champions meetings. Finally, it would have helped to know that some of the mentees were participating in the hackathon.
- I didn’t really interact with the other mentors, apart from people I had established relationships with. I really like the mentorship program, but I feel that it’s failing to scale with the size of student demand. Quality of interactions between students and mentors is coming down [to] how much each student and mentor "get it" before they come to the conference...I don’t feel we’re doing much to prepare them, or providing enough time for the speed network to be meaningful. Also, scheduling clashes between mentor/mentee time and other events reduced mentor/mentee contact, and made the contact we did have compete with minds wandering to other responsibilities.
- I had an amazingly fulfilling experience and connected with my mentee
3. **What are some of the strengths of the PEARC mentor program?**

- Good chance to exchange perspectives
- Good connections
- Early access to brilliant students
- Networking can be difficult for students at conferences; this is a great way to connect
- Creates additional opportunities for students with specific interests to engage around those interests
- The opportunities for students and mentors to get together
- Meeting the students/diversity
- Still in contact with my 2017 mentee!
- Get to know students and guide them to see points they didn’t see before.
- The food
- I heard great feedback on the hackathon and program in general from multiple students. They all seem very positive to the experience they were having
- Providing networking opportunities for the mentee
- Organization and the matching algorithm.
- It feels like there is loose support for the program but solid support
- Scheduling events for mentors and students to meet and talk
- Mentor commitment was clearly stated before sign-up. This helped ensure time commitment and meaningful interactions, and worked well.
- Great to meet students
- Just getting exposed to so many different focus areas. I absolutely loved the poster session because that gave me a chance to speak with more students
- Ability to talk to a mentee and hopefully impact him or her. I saw my mentee from last year and was happy to hear from him that our conversation influenced his decision to pursue a PhD
- Matching was really good; Time allocation was also adequate
- It was my observation that the program was run well and that adequate attention was paid to the pairing process. My mentee and I had similar backgrounds (scientific domain, computing interest).
- Planned time for interaction; combined with poster presentation
- Allowing students to meet professionals in their chosen field of study is hugely beneficial.
- I think it’s fantastic that the PEARC program helps get more adult figures into students’ lives that they may not have met otherwise. I feel that every student has the best chance of building a great career when they can compare a vast array of outlooks on work, professional life, and career strategies. In other words, it’s not about matching them with the *right* mentor as much as a lifetime of being matched with *enough different* mentors of high quality.
- Large pool of students/mentors, diverse matching possible
- Great way for students to interact with professionals in their areas of interest. Also get to see practical applications of a lot of technical research projects.
- Mentors/mentees are from a wide education, research, and ethnic background
- Relationship building
• Great for students, esp. ones who are first-time attendees. Good job matching, and being flexible to people not showing up. And, the organizers really care about the students.
• Is a great opportunity to meet students with different backgrounds and multicultures
• Fabulous student
• The supporting events and great staff

4. How can the PEARC mentor program be improved?

• Conversation starters; some expectations
• It is difficult to attend when the dinner overlaps with the Campus Champions event
• Distribute the survey after all mentor program events and not during events - need a little time to reflect
• Work on projects together
• Vet mentees for desire to participate.
• 😊 (smiley face drawing)
• Provide more personal interaction
• More prep for mentees to understand scope of role and program
• Already discussed in person - provide more explicit ground roles for introductions and communications before and at the conference
• More upfront info
• There could be a mentor database open to students (if mentors are willing to participate) so that students can connect with more professionals
• I struggled with the timing of the event
• Having the time to get to know the students w/ the multicourse dinner. Excellent idea!
• I was happy to learn about it as it was my first time. On some occasions either the student or me were tied up (student competitions vs. networking meetings for me), but I don’t know the workaround for this!
• Provide a platform to keep in touch
• Maybe pair the students with the mentors for the duration of the conference? Some students seemed overwhelmed with volunteering and did not get a chance to attend any sessions.
• May emphasize that early career professionals (in addition to students) can also benefit (as mentees) from the mentor program
• More time for speed networking, minimum of 5, ideally 7-9 minutes per student, without chaos of poorly designed movement schemes; Uncluttered, uninterrupted mentor/mentee time at the conference; Avoid creating schedule conflicts for mentors/mentees; Help mentors meet *one another*, e.g. through an email list, prior to PEARC, to exchange thoughts/tips/strategies; Provide some in-person training and expectation-setting for students before speed networking so they can more effectively use time with representatives from the private sector. (I’ve already volunteered to build this content.)
• Enable more interaction between mentors/mentees
• A little bit more organization will be great. Please, choose a room with less noise, so we can talk to students w/o yelling.
• Mentoring pairs should meet early in the conference, but then be integrated into other events
5. Please share with us any ideas you might have for joint mentor-mentee activities at future conferences.

- Joint (mentor-mentee) poster or presentation review exercise
- Tour of the city (hosting city)
- Expect attendance by both for a talk/workshop or panel
- Hands-on or maker space types of activities, maybe using Legos to make something together
- More social events
- A speed dating for students to connect with multiple mentors
- Sharing meals is a good practice; we can be reasonably assured that both mentor and mentee will be available for meals. It might be worth exploring alternatives for joint activities.
- A 1 or 2 hour session where we show each other your work
- Informal activity/mini golf
- Contact QR codes (provides contact card VCF) for students for ease of info transfer
- Perhaps some icebreaker activities? - Fun facts about mentors and mentees. Find your mentor/mentee based on a unique clue? :-)
- The hackathon. Allowing a mentor to suggest which sessions to attend (and not volunteer for).
- An evening event/dinner outside the hotel would be nice
- Meals; A casual outing like an arcade (e.g. Dave and Buster’s), bowling, etc. that encourages chatting in a venue where students don’t feel like they’re being interviewed and can mix with mentors as peers; Make mentors do lightning talks or a panel on their career paths (if not all mentors, a small but highly varied group) and take questions from the students; A casual reception with snacks and drinks (non-alcoholic only is fine) where students do a ""bingo"" or scavenger hunt to encourage mingling with mentors, e.g. getting a token or filling in a square for things like:
  - Met someone with a degree in a field other than mine
  - Met someone with no degree
  - Met someone who works in the private sector
  - Met someone who works in academia
  - Learned about how someone made a BIG early-career mistake, and survived
  - Learned about how someone ended up in a different field than they planned to
  - Met someone who works in a small organization (<100 employees)
  - Met someone who works in a medium organization (101-9,999 employees)
  - Met someone who works in a large organization (10k+ employees)
  - Met someone who has worked in a startup
  - Met someone who has worked in an organizational turnaround
  - Met someone who has worked in an organizational realignment
  - Met someone who has worked in an organizational shutdown
  - Got someone to tell me about a mid- or late-career mistake
  - Got someone to tell me what they wish they knew when they were my age
  - ... etc."
- Work on some research posters
- A session where the focus is on mentors introducing students to the mentor’s colleagues ("bring a friend")
• Don't know if you keep track of the students that have been mentees in previous years, but creating an event that unifies past mentees and mentor will be great
• Integrate with other events: mentors can bridge and introduce students to other attendees.

6. **Please note any additional comments you would like to make regarding the PEARC mentor program or the conference itself.**

• This evaluation is biased due to a no-show student. I "adopted" another student and interfaced with other mentors
• Ester is fantastic! Amazing!
• Loved meeting everyone, hope to participate again
• Re: the poster judging, the survey could be simplified; should be only a few questions
• It would be good to hear about past success or long-term relationship that have formed.
• I am glad I joined it
• Everything went smoothly; the food was plentiful. It was professionally executed. Well done!
• I think the mentor program is a fantastic idea, and I hope it gets past its growing pains!
• Note for the organizer of the mentor program: Please understand we are volunteering our time. We all gave extra time to meet the students and we enjoy it. However, mentoring the students is not the only thing we do while at the conference. So, please stop scolding your mentors for things that are sometimes out of our control. Such as, answering emails on time or being completely on time.
• ❤ (heart drawing)
Exhibitor Program Survey

1. To what extent do you agree with the following statements regarding your experience as a PEARC19 conference exhibitor?

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>(1) Strongly</th>
<th>(2) Disagree</th>
<th>(3) Neutral</th>
<th>(4) Agree</th>
<th>(5) Strongly</th>
<th>N/A/Not answered</th>
<th>Mean Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>My expectations for exhibiting at PEARC19 were met.</td>
<td>46</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>23</td>
<td>16</td>
<td>1</td>
<td>4.11</td>
</tr>
<tr>
<td>My organization’s expectations for exhibiting at PEARC19 were met.</td>
<td>46</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>24</td>
<td>15</td>
<td>1</td>
<td>4.13</td>
</tr>
<tr>
<td>The PEARC conference attracts a significant number of attendees in my organization’s target audience.</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>10</td>
<td>31</td>
<td>1</td>
<td>4.57</td>
</tr>
<tr>
<td>I (or others representing my organization) engaged sufficiently with members of our target audience.</td>
<td>46</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>21</td>
<td>14</td>
<td>1</td>
<td>4.02</td>
</tr>
<tr>
<td>My organization’s investment in PEARC19 was worthwhile.</td>
<td>46</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>23</td>
<td>17</td>
<td>1</td>
<td>4.20</td>
</tr>
<tr>
<td>My organization is interested in exhibiting at PEARC20.</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>19</td>
<td>22</td>
<td>1</td>
<td>4.37</td>
</tr>
<tr>
<td>My organization would be interested in increasing its support level for PEARC20.</td>
<td>46</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>32.6</td>
<td>16</td>
<td>3.67</td>
</tr>
</tbody>
</table>

2. What products or services were you interested in promoting at the conference? Please select all that apply.

<table>
<thead>
<tr>
<th>Products and services represented</th>
<th>Number of responses</th>
<th>% of N (47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>23</td>
<td>48.9%</td>
</tr>
<tr>
<td>Storage systems</td>
<td>19</td>
<td>40.4%</td>
</tr>
<tr>
<td>Large-scale parallel/clustered computers</td>
<td>20</td>
<td>42.6%</td>
</tr>
<tr>
<td>Servers</td>
<td>15</td>
<td>31.9%</td>
</tr>
<tr>
<td>Cloud services</td>
<td>12</td>
<td>25.5%</td>
</tr>
<tr>
<td>Cluster management tools</td>
<td>10</td>
<td>21.3%</td>
</tr>
<tr>
<td>Integration services</td>
<td>9</td>
<td>19.1%</td>
</tr>
<tr>
<td>Networks</td>
<td>7</td>
<td>14.9%</td>
</tr>
<tr>
<td>Workstation clusters</td>
<td>7</td>
<td>14.9%</td>
</tr>
<tr>
<td>Data-center facilities</td>
<td>2</td>
<td>4.3%</td>
</tr>
<tr>
<td>Desktop workstations</td>
<td>3</td>
<td>6.4%</td>
</tr>
<tr>
<td>Security products or services</td>
<td>2</td>
<td>4.3%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>2</td>
<td>4.3%</td>
</tr>
<tr>
<td>Telecommunications services</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Peripheral equipment</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Other responses:
- Gateway
- AI + Machine Learning
3. At what other conferences did you exhibit in the past 12 months? Select all that apply.

<table>
<thead>
<tr>
<th>Conference at which organization exhibited in last 12 months</th>
<th>Number of responses</th>
<th>% of N (47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC (Supercomputing)</td>
<td>27</td>
<td>57.4%</td>
</tr>
<tr>
<td>ISC (Int'l Supercomputer Conference - Frankfurt)</td>
<td>13</td>
<td>27.7%</td>
</tr>
<tr>
<td>ACM SIGGRAPH</td>
<td>8</td>
<td>17.0%</td>
</tr>
<tr>
<td>Consumer Electronics Show (Las Vegas)</td>
<td>6</td>
<td>12.8%</td>
</tr>
<tr>
<td>SEG (Society of Exploration Geophysicists)</td>
<td>3</td>
<td>6.4%</td>
</tr>
<tr>
<td>IEEE Cluster</td>
<td>3</td>
<td>6.4%</td>
</tr>
<tr>
<td>ACM/SIGARCH Int'l Conference on Supercomputing (ICS)</td>
<td>2</td>
<td>4.3%</td>
</tr>
<tr>
<td>IEEE High Performance Distributed Computing (HPDC)</td>
<td>2</td>
<td>4.3%</td>
</tr>
<tr>
<td>IEEE Vis</td>
<td>2</td>
<td>4.3%</td>
</tr>
<tr>
<td>Interop</td>
<td>1</td>
<td>2.1%</td>
</tr>
<tr>
<td>Storage World Conference</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Int'l Parallel &amp; Distributed Processing Symposium (IPDPS)</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

4. What were the most valuable parts of PEARC19 for you as an exhibitor? Please select all that apply.

<table>
<thead>
<tr>
<th>Most valuable session/tracks/activities to exhibitors</th>
<th>Number of responses</th>
<th>% of N (47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal networking opportunities</td>
<td>31</td>
<td>66.0%</td>
</tr>
<tr>
<td>Technical Program</td>
<td>12</td>
<td>25.5%</td>
</tr>
<tr>
<td>Tutorials</td>
<td>10</td>
<td>21.3%</td>
</tr>
<tr>
<td>Poster Sessions</td>
<td>9</td>
<td>19.1%</td>
</tr>
<tr>
<td>Offsite Networking Event(s)</td>
<td>9</td>
<td>19.1%</td>
</tr>
<tr>
<td>BoFs – Birds of a Feather</td>
<td>6</td>
<td>12.8%</td>
</tr>
<tr>
<td>Job Fair/Speed Networking</td>
<td>6</td>
<td>12.8%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>5</td>
<td>10.6%</td>
</tr>
<tr>
<td>Student Program</td>
<td>3</td>
<td>6.4%</td>
</tr>
<tr>
<td>Visualization Showcase</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Other responses:

- Vendor Showcase
- Plenaries
- Table/booth traffic
- Exhibitor
- Vendor space
5. When is the best time to contact you regarding exhibiting at PEARC19 to be held July 28-August 1, 2019, in Chicago, IL?

<table>
<thead>
<tr>
<th>Contact timeframe</th>
<th>Number of responses</th>
<th>% of N (47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July – September 2019</td>
<td>8</td>
<td>17.0%</td>
</tr>
<tr>
<td>October – December 2019</td>
<td>11</td>
<td>23.4%</td>
</tr>
<tr>
<td>January – March 2020</td>
<td>22</td>
<td>46.8%</td>
</tr>
<tr>
<td>April – June 2020</td>
<td>4</td>
<td>8.5%</td>
</tr>
<tr>
<td>Do not contact; org not interested in exhibiting PEARC20</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

6. Please share with us why your organization is not interested in exhibiting at PEARC19.

- There were no responses to this question.

7. What would make supporting the PEARC Conference Series more valuable to your organization?

- Lower price
- Consider replacing half-day tutorials with quarter-day tutorials. This way, fewer tutorials will compete with each other, and attendees can have more choice and attend more sessions of interest.
- Dedicate a times for attendees to talk to exhibitors outside of breaks and lunch
- Consider shorter tutorials more often so strong sessions are not competing against one another. Promote sessions with signage or highlights prior to show (you may already have this).
- The event needs more time slots for attendees to interact with vendors
- More dedicated vendor/customer interactions
- A little more space between vendor tables.
- Last year the show was better organized to maximize table traffic and informal walk-ups. This year the exhibitors are separated from the natural traffic flow, which was less valuable.
- Better placement of exhibition
- More strategic location of exhibitor area.
- Better traffic flow. We are a little isolated from traffic being on the bottom floor.
- Cybersecurity for research technical programming
- Majority of attendees visiting with each vendor
- Better placement of vendor area. Felt isolated in basement away from most meeting space. A better method of lead capture, many attendees didn’t have business cards to hand out, being able to scan a badge and get info is helpful
- Locate our booth in a better location. We were given a horrible location.
- A method to capture attendees’ info while visiting at the table
- PEARC APP?
- Traffic seemed to stay by food and coffee, which was separately located from the vendors.
- Last year, the food was available in the exhibitors’ area, making it easier for exhibitors to talk to potential customers. This year, the food and coffee were off to the side and a majority of attendees were standing by the food and coffee. Having better traffic to our area, as in PEARC18, would be welcomed for PEARC20.
• Scanning cards, more booth space, easily available electricity.
• I was emailing logistics questions early. If you could set up a wiki or blog post with FAQs based on the stuff you know that won’t change year-to-year, [it would] be helpful.
• We would like to have power for laptop chargers with our table. ~$460 seems excessive for access to an outlet.
• Provide contact/lead capture capability
• Lead capture
• Focus on AI and machine learning continued
• More compressed exhibitor schedule timed with tutorials, workshops, and BoFs
• Speaking Opportunities
• Organization - having booth #, floor plan weeks in advance; Communications - last minute changes, unclear plenary timing until week of; Marketing - as sponsors, having networking reception promoted to attendees

8. Please share with us any additional comments you may have about PEARC19.

• You guys "Rock"!
• Would be good if you can keep all meeting rooms on same floor with vendor showcase, so audience is more consolidated. I know this is difficult to accomplish in all venues. Overall great event again.
• Great event and well organized.
• Routing traffic past tables increases engagement
• Descriptions of exhibitors posted for attendees: what's displayed, what's promoting, what's offering.
• Exhibition area was too isolated from the rest of the conference. Traffic was less than 10% of the attendees.
• Handled well. Staff checked on us and were responsive
• have breaks in vendor areas to have attendees circulate more. A short 2 hour exhibition time on Thursday isn’t ideal. Would prefer to end event on wed. pm. instead of a 10-12 session on Thursday
• Consider eliminating the last short day for vendors
• We heard this many times, but please leave some coffee around at all times.
• All good!
• Great conference! We got to network with a lot of people.
• would like to see better logistics so attendees have to come into/through vendor area. 2) scanning capability to track who we talk to
• The organizers and team are great—thanks so much for all the hard work!
• Outstanding event! Thanks.
• More focused exhibitor time might help. I wanted to go to talks and work my table. The only time people came by was at breaks. Could limit tables to 1-2 days; a table layout would have been helpful (would have brought simpler setup); "MathWorks" has a capital "W" (was not always shown as such); More insight to delivery, power, etc. early on would be nice [was not pre-provided]; $5K was beyond expected minimum sponsorship based on previous year; would be nice ahead of time to know which food was attributed to MathWorks.
• Fewer days of exhibits; More driving of traffic to exhibits - evening snacks/drinks; badge scanners
• Hyatt layout was a bit of a challenge
• Great food this year! But, ice cream for break the first day and veggies for break the next!
• More time for attendees to visit booths; fewer days of exhibits (Mon night to Wed afternoon); Badge scanners; Thanks!
• Double-sided name badges would be awesome