WiCyS 2022

Conference Evaluation Report – May 2022

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WiCyS 2022 – Background and Participation

The WiCyS annual conference is regarded as the flagship conference for women and their allies in cybersecurity, and is the largest cybersecurity conference with equal representation of students and working professionals. The conference is organized and held in accordance with the mission of WiCyS: to help organizations recruit, retain, and advance women in cybersecurity – all while creating a community of engagement, encouragement, and support.

WiCyS 2022 was held in Cleveland, Ohio, during March 17-19, 2022. From the moment attendees arrived at the local airport, they were greeted by WiCyS personnel and volunteers at a WiCyS kiosk stocked with maps, directions, and information. At the participating conference hotels and the Huntington Convention Center, staff and volunteers were present to assist conference attendees and sponsors throughout the event, and ensure they had a rewarding experience at WiCyS 2022. Measures taken to reduce the spread of COVID-19 included the requirement that all attendees show proof of vaccination prior to attending the conference. Additionally, hand sanitizer stations were available throughout the venue, and individual hand sanitizers and masks were distributed upon request.

This year’s event – the ninth annual WiCyS conference – attracted nearly 1,500 attendees and 200 recruiters. The event proudly showcased its 121 sponsors spanning six tiers of financial support. Over 350 volunteers and members from more than one dozen conference planning committees contributed to the event in various capacities before, during, and after the three-day conference. Travel stipends were granted to 218 deserving attendees, and 22 competitive faculty grants were awarded. Participants represented 15 countries, diverse backgrounds, varied credentials, and an array of life experiences. Registration for the much-anticipated event reached capacity a mere four hours after the general registration window opened.

WiCyS 2022 – Theme and Conference Forums

This year’s conference schedule featured a variety of tracks and sessions purposely designed to target the interests of attendees ranging from college students and veterans to mid-level professionals and seasoned executives. Five conference tracks framed WiCyS 2022: Current Technology and Challenges, Looking Ahead, Best Practices, Career Development, and CPE. Participants were able to scan QR codes provided at the end of qualifying sessions to receive CPE credits.

From morning to evening, attendees were provided both formal and informal opportunities to learn, explore, practice, network, and apply their knowledge and skills to real-world scenarios. The jam-packed conference schedule included workshops, keynotes, lightning talks, technical presentations, employer socials, meet-ups, and leadership events. One Capture the Flag
competition was open to student participants, and a student poster session showcased the research of 29 undergraduate and graduate students. Two-hour hands-on technical workshops geared toward students, educators, practitioners, and researchers were open to those who registered in advance. Topics included protocols, teamwork, spoofing and tampering, privacy, security, patient safety, and denial of service.

The WiCyS annual conference has developed a reputation for its distinguished presenters, diversity of topics related to women in cybersecurity, and collection of conference forums that appeal to a variety of audiences. In line with the conference theme “You Are Right Where You Should Be,” keynote speakers from academia, for-profit companies, and government agencies spoke about the present-day landscape for women in cybersecurity, and proactively securing a better future for women and their allies in tech. One speaker discussed the value of “serial learners,” and emphasized the importance of women serving in the capacity of mentors for their up-and-coming counterparts. Participants reported that the conference reminded them of the significance of their work in securing our nation’s critical infrastructure in times of calm and crisis.

The conference schedule was available on the WiCyS website and the Whova app. Via this event management app, registrants could browse the conference program, view speakers and sponsors, connect with one another prior to arriving in Cleveland, and pose questions to the event organizers. The detailed conference program consisted of agendas, session summaries, maps of the venue, and a schematic of the career fair. Several attendees remarked favorably about the inclusion of QR codes for certain programming elements. The conference organizers received praise for executing a well-organized event, from the smooth on-site check-in on day one of the conference to the streamlined luggage and coat check on day three.

On the second day of the conference it was announced that one of the speakers scheduled to present on Saturday was unable to attend the conference. The conference organizers jumped into action and invited attendees to sign up for an opportunity called Sharing Your WiCyS Stories on Stage. Ten attendees were selected for this impromptu engagement that ended up being a powerful segment on diversity, cultivating a sense of belonging, and networking. One participant shared how the 2021 conference allowed her to connect with the LGBTQ+ community and witness it grow into a WiCyS affiliate in 2022. Another woman divulged that she arrived at the conference looking for employment and was hired by day three of the event. A veteran shared how this conference was helping her transition back into civilian life.

**WiCyS 2022 – Career Fair and Career Village**

The career fair and career village were open to all registrants on March 18, 2022. Exhibitors shared information about their companies/institutions, provided details about job and internship opportunities, collected resumes, and distributed swag to passersby. Several sponsors even conducted on-the-spot interviews while others were looking to promote brand awareness and
showcase their cybersecurity divisions. Students were given the opportunity to have their resumes reviewed by their more senior colleagues, sit for professional headshots, and participate in mock interviews to improve their confidence and preparedness.

Conference sponsors transformed the convention center floor into an interactive space for hiring, sharing, informing, and inspiring. An impressive lineup of Fortune 500 companies, small- to mid-size tech enterprises, government agencies, colleges and universities, financial institutions, retail outlets, and healthcare providers from around the country were present during the career fair. Although some sponsors indicated the pool of qualified applicants was sufficient, others felt there were not enough students near the end of their degree program looking for full-time employment. Overall, the career fair was regarded as a worthwhile investment of time and resources among this year’s sponsors.

**WiCyS 2022 – Conference Evaluation**

WiCyS partnered with Blake Urbach, Principal Consultant of Preferred Program Evaluations, to conduct an evaluation of this year’s conference. The evaluation of WiCyS 2022 included informal interviews, observations, and anonymous surveys for participants and sponsors. Representing Preferred Program Evaluations on site was Dr. Carmita McCall, who attended the conference, conducted brief interviews with participants, and observed WiCyS 2022 in action. The purpose of the evaluation was to better understand the experience, value, and impact of the conference among its stakeholders, and to inform future WiCyS programming.

The participant survey was designed in SurveyMonkey and at the conclusion of the conference the survey weblink was distributed to 1,494 attendees. A total of 676 participants responded to this survey (response rate of 45%). Similarly, a weblink to the sponsor survey was emailed to all 121 conference sponsors once WiCyS 2022 concluded. A total of 67 sponsors responded to this survey (response rate of 39%). The findings from the participant and sponsor surveys are provided in the results dashboards starting on pages six and 31, respectively, of this report.

During the three-day conference, the evaluator spoke one-on-one with participants and sponsors to gain insight about their WiCyS 2022 experience. She spoke with students seeking to improve their technical skills, mid-career professionals searching for inspiration, faculty members looking for innovative ways to share their research, and sponsors pursuing talented candidates to join their workforce. When asked why they chose to attend WiCyS 2022, participants shared:

**Industry Professionals**

- Leaders are starting to learn and share that one of the best ways to get talent is to come to events like this.
- It’s good that they don’t just have technical workshops. There are other roles within cybersecurity and other considerations that people in cybersecurity need to know about.
• This is my first year in the leadership track and I’m excited to be meeting other leaders because I just started a new management position at my job.
• I’m in a DEI initiative at work and I’m happy to see workshops such as breaking the glass ceiling and inclusion.
• The conference reminds me of why what I do is so important. It doesn’t always feel that way at work. I feel rejuvenated.

Students and Faculty
• I’m happy I was able to find companies who are willing to hire international students.
• The woman from Harvard [Dr. Latanya Sweeney] was inspiring. There is more to what we are doing than just fighting off hackers.
• This is my third time coming. I’m not sure what job I will have in the future, but I have met so many people here and I have found a good mentor.
• Face-to-face conferences are so important because I have so many questions about what it would be like to intern and I can ask them personally.
• Our school is interested in recruiting students for our new cybersecurity program. There are so many students here and we have gotten a lot of interest.
• We are here with a group of students from our university. We’ve been sending students since 2015. They enjoy it, and this year we were able to drive here because it was close enough.

Future Conference Considerations

Coordination
The conference organizers made every effort to keep participants and sponsors apprised of conference logistics. Through email, social media, and the Whova app, attendees were made aware of expectations, programming, and changes to the schedule and location. One attendee recommended that the app provide an option to only receive notifications on subscribed posts, and to show updates in chronological order.

There was some confusion as to which activities required additional registration or RSVP. It may be practical to collect RSVPs for invitation-only activities as part of the initial registration process, and/or during check-in on day one of the conference. Some attendees were under the impression the Whova app was a tool they could use to sign up for sessions but were disappointed when they showed up for a workshop and did not have the proper access code for admittance.

Facilities and Staffing
Requests were made for additional signage, as some attendees had difficulty navigating the conference venue and locating their session site in a timely manner. It may be advantageous to have poster-size printed maps of the venue placed at various entrances.
The designated lunch, dinner, and snack times provided excellent opportunities for networking and collaborating. There was, however, an extended delay with the serving of vegetarian meals, and several complaints about small portion sizes were voiced. The overall dining experience (food quality, selection, and seating) was considered inferior to the previous year’s conference venue.

Some attendees noted their preference is to have the conference rooms and lodging in a single location. Instead of taking a shuttle to and from the convention center, they were partial to the previous year’s conference venue where the hotel and conference center were on the same grounds. Several attendees commented on the necessary addition of an accessibility or disability coordinator to ensure individuals with disabilities receive proper accommodations for lodging, transportation, and seating at each location.

Programming Elements
Several attendees would like the career fair to span two days of the conference, and some participants were in favor of extending the annual conference to four days. Attendees also suggested incorporating designated blocks of time for networking into the conference schedule. Some attendees found the emphasis on student-centered sessions to overshadow the content applicable to mid-career professionals. One attendee suggested “tagging” or categorizing session descriptions as beginner, intermediate, or advanced, thereby making it easier for participants to browse the schedule and determine which sessions are most applicable to them.
The WiCyS 2022 participant survey was designed to assess the experiences and perceptions of conference participants, and to inform future WiCyS conferences and programming. The survey weblink was distributed to 1,494 participants at the conclusion of this year’s conference. A total of 676 conference participants responded to the anonymous survey in whole or part. Ninety percent of respondents were women; males accounted for 7% of the survey sample, and non-binary participants totaled 2%. One percent of respondents chose not to indicate their gender.

### RESPONDENTS BY CONFERENCE ATTENDANCE

For nearly two-thirds of respondents, WiCyS 2022 represented their first time participating in a WiCyS annual conference.

<table>
<thead>
<tr>
<th>No, 2022 is my first time in attendance</th>
<th>Yes, on one occasion</th>
<th>Yes, on more than one occasion</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>26%</td>
<td>11%</td>
</tr>
</tbody>
</table>

### RESPONDENTS BY RACE/ETHNICITY

Over half of respondents identified as a racial or ethnic minority.

- Caucasian: 47%
- Asian: 22%
- African American/Black: 17%
- Hispanic/Latino: 9%
- Middle Eastern, North African, or Arab: 2%
- Biracial: 2%
- Other: 1%
The conference attendees were nearly evenly split between students and professionals. Forty-seven respondents identified as educators, and two noted they were recruiters. Student attendees spanned the academic credential spectrum from pursuit of a professional certificate to a doctoral degree. Seven of the respondents were high school students.

**RESPONDENTS BY ROLE**
Forty-seven percent of respondents identified as students, and 46% identified as working professionals outside of the education sector.

**RESPONDENTS BY EDUCATIONAL STANDING**
Forty-four percent of student respondents were pursuing a bachelor's degree, and another 45% were enrolled in a graduate degree program.
Respondents who identified as students were asked to rate the influence of attending WiCyS 2022 on their academic pursuits. Over 90% of respondents reported feeling inspired by the role models they encountered throughout the conference. Nine out of 10 respondents also experienced a gain in self-confidence and knowledge of careers in cybersecurity or a related field. Over half of students reported feeling motivated to start or join a WiCyS student chapter.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was inspired by the role models I encountered at WiCyS 2022</td>
<td>68%</td>
<td>24%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>WiCyS 2022 increased my confidence to pursue a career in cybersecurity/related field.</td>
<td>64%</td>
<td>26%</td>
<td>6%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>WiCyS 2022 helped me learn about career opportunities in cybersecurity/related field.</td>
<td>61%</td>
<td>28%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>WiCyS 2022 increased my commitment to complete my current degree program.</td>
<td>58%</td>
<td>25%</td>
<td>13%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>WiCyS 2022 helped me learn about academic programs in cybersecurity/related field.</td>
<td>42%</td>
<td>37%</td>
<td>15%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>WiCyS 2022 inspired me to start or join a WiCyS student chapter.</td>
<td>33%</td>
<td>23%</td>
<td>36%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>
PROFESSIONAL-CENTERED CONFERENCE UTILITY

Respondents who identified as professionals (across all sectors in attendance) were asked to rate the influence of attending WiCyS 2022 on their professional pursuits. Nearly 90% of respondents reported feeling more connected to professionals in their field, and 85% intend to share ideas/resources from the conference with their colleagues. Over two-thirds of these attendees gained knowledge or skills in cybersecurity, and more than half expressed interest in starting or joining a WiCyS affiliate.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>WiCyS 2022 helped me feel more connected to other professionals in my field.</td>
<td>58%</td>
<td>30%</td>
<td>6%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>WiCyS 2022 helped me feel more enthusiastic about my work.</td>
<td>53%</td>
<td>33%</td>
<td>11%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>WiCyS 2022 provided ideas/resources that I intend to share with my colleagues.</td>
<td>39%</td>
<td>46%</td>
<td>8%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>WiCyS 2022 inspired me to start or join a WiCyS affiliate in my area.</td>
<td>26%</td>
<td>26%</td>
<td>35%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>WiCyS 2022 advanced my knowledge and/or skills in cyber security.</td>
<td>25%</td>
<td>42%</td>
<td>19%</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>
ATTENDEE PERSPECTIVES ON CONFERENCE ELEMENTS AND PERSONAL GROWTH

Nine out of ten respondents would recommend the WiCyS annual conference to a colleague or peer, and this same percentage indicated that attending the conference contributed to their feelings of belonging to the cybersecurity community. Ninety-five percent of respondents established at least one new professional contact during the conference. Ninety percent of respondents gained at least one takeaway to apply to their job or studies.
ATTENDEE PERSPECTIVES ON WICYS 2022

Using a scale of “very valuable” (4) to “not at all valuable” (1), respondents were asked to rate the value of conference forums offered as part of WiCyS 2022. The weighted average for students and professionals highlights the preferences of these two groups of attendees. (“Not applicable” was eliminated from the calculation.) The highest ranked forums among students and professionals include the career fair, networking events, presentations, and keynotes. Professionals also gave high marks to the invitation-only senior leadership lunch.

<table>
<thead>
<tr>
<th>Forum</th>
<th>Students</th>
<th>Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career fair</td>
<td>3.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Networking events</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Presentations</td>
<td>3.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Keynotes</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>First timer’s session</td>
<td>3.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Lightning talks</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Panel discussions</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Workshops</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Federal scholarship session</td>
<td>3.7</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Overall, attendees were pleased with the conference program and variety of conference forums offered. Requests were made for a greater number of technical workshops and more engagements (or tracks) geared toward mid-level employees. Additional recommendations include extending the conference by one additional day, and scheduling the career fair for two days instead of one. Several attendees noted there is not enough time built into the schedule to network or maneuver from one session to the next without showing up late.

<table>
<thead>
<tr>
<th>Event</th>
<th>Students</th>
<th>Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student chapter meetup</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Student poster session</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Faculty funding session</td>
<td>3.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Birds of a feather</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Affiliate meetup</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Senior leadership sessions</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Senior leadership lunch (invite only)</td>
<td>3.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Early career breakfast (invite only)</td>
<td>3.3</td>
<td>3.1</td>
</tr>
</tbody>
</table>
WiCyS 2022 Participant Survey
Results Dashboard – May 2022

WiCyS 2022 represents the first time this annual conference has been held in Cleveland. Twenty-eight respondents indicated they were local to Cleveland, and eight of those surveyed resided outside of the U.S. A combined 45% of respondents were from the following states: Texas, Ohio, New York, Florida, Pennsylvania, Tennessee, and California.

**OPINION OF CLEVELAND**

Prior to visiting Cleveland, 69% of respondents (excluding locals) had a neutral opinion of the city.

- Neutral: 69%
- Positive: 16%
- Negative: 15%

**CLEVELAND AS A LEISURE DESTINATION**

Among the respondents living outside of Cleveland, 50% would consider visiting this city in the future for leisure.

- Strongly agree: 20%
- Agree: 30%
- Neither agree nor disagree: 25%
- Disagree: 18%
- Strongly disagree: 7%
The local host of WiCyS 2022 was the Cleveland Consortium led by Cleveland State University. The three-day conference was held at the Huntington Convention Center. Participants were asked to share their view of Cleveland as a tech city, and whether or not they would consider moving to Cleveland to accept a promising job offer.

**CLEVELAND AS AN ESTABLISHED TECH HUB**

Forty percent of all respondents view Cleveland as an established technology hub.

- Strongly agree: 11%
- Agree: 30%
- Neither agree nor disagree: 49%
- Disagree: 9%
- Strongly disagree: 1%

**RELOCATION FOR JOB OPPORTUNITY**

Twenty-seven percent of respondents would be willing to relocate if offered a job in Cleveland that matches their skillset and salary requirements.

- No: 43%
- Unsure: 30%
- Yes: 27%
Personal and professional benefits of attending WiCyS 2022

“Connecting with other professionals, educators, and industry representatives.”

“WiCyS 2022 gave me more clarity on the various paths I can pursue within the field. In addition, it gave me connections to different companies through which I can find internships.”

“Attending WiCyS gives me the motivation to do more in tech. It inspires me to volunteer and advocate for women in the field. Most importantly, it allows me, a high schooler, to make connections at a young age.”

“As a professional in the field with ~10 years of experience, this conference re-sparked my passion and made me realize how fortunate I am to be working in a company where women in cybersecurity are well-represented and respected.”

“I loved helping colleagues and meeting new ones.”

“Helped fight my imposter syndrome”
Personal and professional benefits of attending WiCyS 2022

“It validated my choice to pursue a career in cybersecurity after being a housewife for 27 years. I was able to network and received great advice from the Career Village! WiCyS is a blessing for me and life changing! I find the women in this field to be Kind, Caring, and Brilliant!! I want to be a part of this Amazing Movement!”

“Coming from a professional path outside of cyber, it is often hard to feel like part of the community. WiCyS instantly made me feel like not only part of the community but an asset to the community. It was a lovely overall experience. Also got my first cyber fangirl crush; Jen Easterly was great!”

“My role is a recruiter and I attended the career fair on behalf of my company. It has given me a better, deeper perspective of the cyber/security industry and so glad to have met amazing women in the field!”

“As I am an educator who needs business/industry partners, the career fair was beneficial to me for that”
Personal and professional benefits of attending WiCyS 2022

“I learned about the many different opportunities available to students, such as internships, graduate school options, certificates, and jobs. I also challenged myself by playing the CTF.”

“New mentors and professional contacts”

“Allowed me to gain a stronger understanding of the challenges women need to learn to overcome in the tech industry as a whole, as well as understand better how to break down barriers of access in cyber security as a whole”

“Made professional networking contacts and job opportunities”

“Gave me an opportunity to engage with others about pursuing graduate-level education and careers, also gave me a chance to learn more about the types of people who are attending the conference and ways I can help bolster future lives of future cybersecurity women and underserved minorities.”
Personal and professional benefits of attending WiCyS 2022

“Connections, connections, connections...”

“I work in IAM and previously didn't really feel like I could call myself a cyber security professional - but this conference really opened my eyes to how important and how imbedded IAM is to cyber security and I now feel like I can introduce myself as working in cyber security”

“WiCyS 2022 increased my confidence in my capability to get a job in the field.”

“It made me feel so much better and refreshed from being drained struggling to fit in with a lot of my male colleagues and feeling support from women going through the same things as me. Before the conference, I had extreme burnout from the way my male classmates don't really connect or converse with me minus a few supportive people but this helped me get through a lot of that burn out.”

“I was able to network with 100s of industry professionals in 2 days and I believe it is an amazing feat.”
Personal and professional benefits of attending WiCyS 2022

“At WiCy[S], I feel at home. I met many people in diverse roles and levels of expertise. I enjoyed talking to people and got those skills that really matter.”

“Attending WiCyS 2022 changed my life. My confidence has increased beyond imagination. I was afraid to talk to people. Afraid to sell myself. Afraid to value myself. WiCyS has empowered me.”

“Great talks all around. Networking was great. New mentor to old and new friends.”

“The resume review was very helpful. It was also great to meet other women who transitioned to cybersecurity.”

“Research collaborators with great ideas”

“Going to take home lessons about equity and inclusion and try to push them at my department”
Personal and professional benefits of attending WiCyS 2022

“The resume workshop at the career fair was helpful”

"This group is the backbone of my networking strategy. Having all these strong capabilities women get together is so inspiring and I leave every time Ready to conquer the world! Can’t wait to see what you do for the 10 year anniversary.”

“It inspired me to think bigger about the work we do and reminded me of how much work is being done and how important it is to encourage young women to get involved! I also got to meet 2 of my mentees in person which was wonderful!”

“Grew my network, inspired by other people in the field”

“The career fair benefitted me greatly with 4 interviews for full time positions.”

“Our company had very high quality candidates and we extended 6 offers.”
Suggestions for improving the annual conference

“More workshops for people who provide cybersecurity workforce development training programs and secondary and postsecondary education programs”

“More technical talks. This conference definitely felt like a ‘get women into cyber’...and was catered towards those new in the field. I really wanted hands-down, nitty-gritty technical talks (like what you’d see at DEF CON). Also, a CTF for professionals too. Was sad only the students could participate.”

"More technical deep dives would be nice!"

“Make workshops more hands on!”

“For recruiters to also have access to keynote speeches and lunches”

“Perhaps a networking breakfast/break dedicated to industry professionals that is not just senior leadership.”
Suggestions for improving the annual conference

“Please more technical talks and fewer inspirational/’how I overcame being the only female in a male dominated unit’ talks. The inspirational talks are wonderful, but I wonder if they are setting the wrong tone for younger women who are excited about entering the profession. Let’s not tell them about the struggles, let’s tell them about the triumphs.”

“While I appreciate motivational speeches, there were a bit too many ‘I am a success, and you can be too’ presentations. Would like something with a bit more substance.”

“Some of the lunch keynotes felt like sales pitches for their organizations.”

“Some of the presentations seemed to be promoting companies and not really providing any substantive content. I think the recruiting should be left to the Career Fair/Mentoring Socials and the presentations should be company-neut[r]al.”
Suggestions for improving the annual conference

“Have more sessions and encourage career fair companies to target mid career level women. I love all the opportunities for students and early career but as someone who has worked for 7 years, it would be nice to network with other people at my career stage/have sessions catered to my level.”

“It seems like a large focus of recruiting is focused on students, but a lot of the open roles at companies are for more experienced positions. It would be great to provide an opportunity for networking or career fair separate to those with experience (even if its 3-5 years experience).”

“Move forward with planning for attendees who are not student or early-career focused. Plan sessions that are not focused on technical topics, not everyone in cybersecurity has a focus on technical topics. There are many supporting roles (project management, GRC staff, audit, etc.) that we are leaving out.”

“I also wish that there were more technical presentations instead of motivational presentations.”
Suggestions for improving the annual conference

“Vegetarian meals were rough and took a very long time”

“Better food options for vegetarians and more snacks; more time in between sessions to take a break; better communication about cancelled workshops”

“Food service is always challenging, and it detracted from the keynote speakers this year. Recommend giving some dedicated eating time before the keynotes start, so they aren’t overpowered by the noise.”

“Easy access to all slide shows from workshops, presentations, keynotes! I was not able to get power points from all the workshops I attended. I did take several photos of the slides in class but that is distracting.”

“I would like to see game rooms like backdoors and breaches. Will be fantastic to have [B]lackhills join the conference. More tabletop exercises.”
Suggestions for improving the annual conference

“I do not have any particular suggestions for improvement, but I will say the Whova app was an absolute asset. I definitely recommend continuing to use the app for future conferences. This is the first conference I have been to that offered a companion app, and I found it extremely helpful for curating my conference agenda and networking with other people at the conference.”

“Although Whova did great job, still helpful to have a paper of MAP of the conference room in one glance (especially for the older aged folks who needs to wear a reading glasses to look close the apps)”

“Navigating events at the conference was sometimes confusing...career village vs career fair, leadership summit vs leader series, etc.”

“More signage”

“A better sign at the front of the Career booth area as to opening hours, closing hours and where is an ENTRANCE door.”
Suggestions for improving the annual conference

“The career fair should be longer -- two days instead of one. Please encourage all companies to send women from security teams to represent them.”

“An additional half-day for the career fair and additional technical workshops.”

“It was not clear to me that the Career Fair was only one day! There were so many vendors to visit, if I had known they were just there for one day, I would have strategized visits to the booths differently.”

“Have career fair on both Thursday and Friday. Or at least have it start at noon on Thursday.”

“Extended career fair times (also we really need an industry time slot for career fair so companies can get to know each other and network in that space instead of doing so while the students are also networking)”

“An additional half-day for the career fair and additional technical workshops.”
Suggestions for improving the annual conference

“I would suggest that all WiCy[S] conferences in the future occur in the same location as the hotel so we won't have to walk half a mile to get to the conference. By that time, we're sweaty.”

“More communication/support of staff and workshop presenters before they present. I was on a couple that needed help with setting up and they had no one around to help.”

“The conference was over-communicated (daily emails) but the communications lacked content and direction. Many of us felt very confused on our role there and expectation.”

“Less emails leading up to the conference, important details were missed due overwhelming volume of emails sent”

“Add an optional day before or after the conference with local area tours”
Suggestions for improving the annual conference

“A disability coordinator is necessary on the conference committee. I heard from our disabled attendees that it felt like an after thought. An environmental coordinator would also be good to ensure the conference is carbon neutral.”

“If there could be a committee or even just one person assigned to make sure that people who need accommodations receive their accommodations and have no other issues, I think that would be very beneficial to continue to allow those diverse groups to attend without stress.”

“More time in between sessions, it was very hard to run from one session to another with 0-5 mins to go from one room to another.”

“As an educator, I found that the last day of the conference there were several sessions I was interested in but they were all held at the same time. I wish these "best practices in diversity" sessions would have been spread out throughout the conference.”
Suggestions for improving the annual conference

“Please move away from people in skirts = a woman and blue person in pants = a man.”

“I know WiCyS stands for Women in Cybersecurity and I love all the support that women like me get here, but as an LGBTQ+ ally I think we should be more inclusive of non-binary folks. A thing that I noticed all throughout the conference is that all charts brought up always mentioned men and women. There was no mention of non-binary folks in the keynotes at the very least.”

“I would like if there could be some talks about self esteem and confidence and how to get over internal fears/struggles in order to be successful.”

“Also, I'd suggest the WiCy[S] conference occurs in the Fall months as then the companies at the career fair would have summer internships available. I went to the career fair this time and most of the companies did not have any summer internships.”
Suggestions for improving the annual conference

“It would be amazing if there was a much larger male population at the conference next year where we have a section dedicated to educating them on how difficult it is to be a women in cyber and in engineering in general and make space and time to teach them how to be allies for us . . . it would be amazing if we had a lot of male engineers and executives come out for their training and discussions on how to both help us and how to understand us and become aware of their unknown biases.”

“Better tagging/categorizing of events (e.g. technical vs. non-technical talks; whether a talk is aimed at academia vs. industry; whether a talk covers beginner, intermediate, or advanced topics).”

“A CTF that is open to both students AND industry professionals (many women who are no longer students but who are first trying to break into cyber rely on practice from CTFs and similar challenges to prove their experience, improve their skills, and demonstrate their passion in the industry to make up for a lack of formal schooling).”
The WiCyS 2022 sponsor survey was designed to assess the experiences and perceptions of conference sponsors, and to inform future WiCyS conferences and career fairs. The survey weblink was distributed to all 121 sponsors of WiCyS 2022 at the conclusion of the conference. A total of 47 conference sponsors responded to the anonymous survey in whole or part.

**RESPONDENTS BY TYPE OF COMPANY**

Thirty-two percent of respondents represent a privately held for-profit business.

- Privately held for-profit business: 15
- Publicly traded for-profit business: 11
- College or university: 7
- Government or military*: 7
- K-12 academic institution: 4
- Non-profit organization: 3

*Includes federally funded research and development centers

**YEARS OF CONFERENCE SPONSORSHIP**

Thirty-eight percent of respondents represent a company participating as a WiCyS annual conference sponsor for the first time.

- Yes, on more than one occasion: 19
- No, WiCyS 2022 is our first time as a sponsor: 18
- Yes, on one occasion: 10
The pre-WiCyS 2022 virtual career fair was held in early March 2022. Participation in the event was open to all WiCyS 2022 conference sponsors and attendees. Sponsors were provided access to the virtual exhibit hall and WiCyS resume database, and encouraged to engage with candidates using the booth chat features. This engagement and other WiCyS events serve as a prime opportunity for employers to interact with motivated job seekers.

**PRE-WICYS 2022 VIRTUAL CAREER FAIR**
Among the respondents who participated in the pre-WiCyS 2022 virtual career fair, 82% found it to be a worthwhile engagement.

- Did not participate: 15
- Found it to be somewhat worthwhile: 13
- Found it to be very worthwhile: 5
- Did not find it to be worthwhile: 4

**RECRUITING FROM WICYS EVENTS**
Over half of respondents have recruited from a WiCyS event (conference, career fair, or local meet-up) on one or more occasions.

- Yes, on multiple occasions: 11
- Unsure: 9
- Not yet: 9
- Yes, on one occasion: 9
Respondents were asked to rate their satisfaction with several components of WiCyS 2022 using a scale of “strongly agree” to “strongly disagree.” Sponsors were overwhelmingly pleased with the level of attendee traffic at their booths, and the professionalism of attendees they encountered. Every respondent indicated that participating in WiCyS 2022 was a worthwhile event for their company, and nearly three-quarters will consider a year-long engagement with WiCyS. Per 16% of sponsors, there is room for improvement regarding pre-conference communication with WiCyS personnel.
Respondents were asked to rate the priority level of several opportunities as they relate to their company’s WiCyS 2022 sponsorship. The top three opportunities given a “high priority” rating were supporting WiCyS’ diversity mission, branding, and establishing relationships for future hires.
Respondents were asked to rate the priority level of recruiting several classifications of worker for their company. The top three worker groups given a “high priority” rating were employees with 0-5 years in the workforce, veterans, and employees with 6-10 years in the workplace. More than half of respondents assigned a “low priority” rating to high school interns.
Prior to visiting Cleveland, 55% of respondents (excluding locals) had a neutral opinion of the city. Thirteen percent of respondents viewed the city positively, and 11% of the survey sample held a negative impression of Cleveland before attending WiCyS 2022.

**CLEVELAND AS A LEISURE DESTINATION**

Among the respondents living outside of Cleveland, 54% would consider visiting this city in the future for leisure.

**CLEVELAND AS AN ESTABLISHED TECH HUB**

Forty-eight percent of all respondents view Cleveland as an established technology hub.

Strongly agree: 16%
Agree: 32%
Neither agree nor disagree: 47%
Disagree: 5%
How did sponsoring WiCyS 2022 benefit your company’s mission and goals?

“Looking for diverse talent for our intern program and full time hires.”

“It provided professional development and supported inclusion diversity goals”

“Visibility for Rider U’s cybersecurity degree programs, BS and MS.”

“Diversity, equity, and inclusion. We had the opportunity to network and share our values.”

“Student recruitment”

“Branding and pushing students to apply to an open announcement”

“We support and promote diverse individuals with strong cybersecurity knowledge – WiCyS matches this.”

“Employer branding benefit”
How did sponsoring WiCyS 2022 benefit your company’s mission and goals?

“Met our diversity and current hiring goals to sponsor”

“Visibility and recruitment”

“This was our first time here to determine if it would be worthwhile to come back in the future for: hiring, networking, etc.”

“Diversity, ideation, hiring great talent are all missions supported by WiCyS”

“Spread brand awareness, recruited new, diverse students.”

“It helped us get an opportunity to meet and talk to women in the industry.”

“We bring students to WiCyS every year and the majority leave with an interview appointment or offer. We also recruit steadily from [W]i[C]y[S].”
What suggestions do you have for improving the WiCyS annual conference and career fair?

“Provide a single checklist of all activities required and/or recommended for sponsors that include cost when possible, due date, and vendor information.”

“Tagging and signage for booths regarding sponsorship requirements (ex. Not sponsoring at this time, etc.), more chairs and storage for packaging”

“Having the event so late in the evening is problematic for shipping out materials via FedEx and UPS. Consider a full day of the career fair followed by a half day to allow for ease of packing up and traveling home.”

“Inclue some additional keynote or panel discussions that provide more discussion on the people, processes, and technology in cyber.”
What suggestions do you have for improving the WiCyS annual conference and career fair?

“Less wordy emails”

“Start earlier and end earlier, not on [S]t. Patrick's day”

“Communication was slow and poor on many levels - virtual fair, in person and about registration. The staff member that signed up left our company and we had a balance due, unbeknownst to the rest of us, the response from the staff member about this was not friendly.”

“Promote the conference for all professionals and not just students”

“The schedule arrived late to us and it was a bit hard to tell what we needed to be here for besides career day.”
What suggestions do you have for improving the WiCyS annual conference and career fair?

“Have time dedicated to the career fair”

“Perhaps extend career fair for another half day.”

“A place to borrow dollies if needed.”

“Less overlap between sessions”

“Lunch was poorly executed. Some people were never even served lunch.”

“It was truly amazing! Maybe just a little less communication via email leading up, more concise.”