

CybSec Champions Fellowship

Purpose/need: There has been great attention on the need to fill the cyber security work force. With the focus largely on college students and veterans re-entry into the work force, recently, the focus has been shifted to high school age and under. Providing programs targeted to this age group has started with competitions such as CyberPatriot and CTFs and programs to support specific groups such as girls through avenues like Aspirations in Computing and Girls Who Code, people are understanding the need to start training and supporting the younger generation. Without planting the seed at a younger age, there will continue to be a shortage in supply for the cyber security workforce. Without having young people grow up with the vocabulary of security in this technology driven world, there will never be a shift in culture that embraces security as an integral part of ensuring the balance of the cost of technology.

I propose the missing piece in the work that is being done in the investment in the people investing in the development of these young people. "Champions" that have been fighting to ensure that young people are being exposed to opportunities will not only better the young person's future, but will also contribute to the betterment of the world. Champions might be school teachers or girl scout leaders or after school providers, but they all share similar traits: be passionate about their vision of what the world should be like and be willing to put in the work to see it happen (evidenced by the countless "volunteer" hours of work they dedicate), be passionate about the hope they place in young people, have an understanding about the system we live in (economic mobility only exists if young people are trained in an area that they will have an opportunity to find work), and look at the world in the broader sense (in order for us to be "safe," we must be the ones defending). Like super heroes, these champions view their role in society as agents of change with a code that they live their lives by. This population of people can often be found coaching cyber competition teams, starting a chapter of a local Girls Who Code group or volunteering to be a Girl Scout leader. There are few resources widely available for these champions to develop and be even more supportive to the young people they work with. However, champions have learned to be resourceful and forage along the way and find what they need along the way to be the best champion they can be for the young people they work with. There needs to be a system (program) in place to support the people supporting the young people so that this pool of talent can even make it to the next level, which could be college or directly to the work force.

Roles/players:

Champion: Teacher, Community volunteer, after school provider or anyone else not in a traditional role that is supported but would benefit from professional development/mentoring specific to the cyber security field.

Mentor: A person at an institution of higher learning or even an industry partner dedicated to being part of the pipeline of ensuring the growth of the pool of applicants in the security field. Willing to invest time and resources to be a part of a team of adults supporting the young people the Champions work with.

Program Manager: Someone who is overseeing the implementation of the program and ensuring documentation and paperwork is being handled accordingly.

Program overview: Cohort of Champions will be chosen and matched with Mentors in their state. Reason, so that they are able to create a local support network. On average, about 72 percent of high school students stay in state when attending college (www.statisticbrain.com/percentage-of-out-of-state-students-at-public-universities). This will give the Mentor who works an edge in encouraging these students to attend the school he/she represents. He/she will have developed a relationship and support the young person in his/her transition, a continuation of support through the “pipeline.” For an Industry Mentor, his/her role can be and not limited to helping plant the seed of the end goal, of finding work and supporting the steps necessary to get there. Benefit for Industry partners (mentors) is a pool of young people they would be able to recruit to work for the Industry partner’s company, either right out of high school or out of college. The perfect triad would be Industry, Higher Ed, and the Champion. Benefits for the Higher Ed Mentor would be to link his/her students with Industry partner as well. Champions would benefit from the resources provided by his/her mentors to bring back to students. From curriculum to pool of people to bring in for career awareness opportunities, everyone would benefit.

Program Components:

- Champion would meet with Mentor(s) at least once a month to check in on needs and opportunities. This could be done virtually or in person. Ideal situation would be to meet, then to also meet with students participating.
- Champion would have an opportunity (funding) to attend at least 1 conference for development and networking opportunities.
- Champion will work with Mentor(s) to develop a project/research to further the development of cyber education. Examples, but not limited to gamifying cyber security, curriculum for high school or middle school aged students, events to target growing interest in cyber security, especially in underserved areas. Project/research would be presented at an event such as CISSE and/or locally at an ISSA event.
- Champion and possibly Mentors will receive a stipend for their commitment to the Fellowship.
- Champion will commit to minimum of 1 year. Possible to grow Fellowship to 2 years if he/she returns as a Mentor to next cohort.

Qualifications of Champions/Who should apply?

- Majority percentage of applicants should be people with a proven track record of their commitment to cyber security education to middle and high school students.
- Small percentage of Fellows should/can be newbies who are looking for help getting started.
- Works directly with middle or high school youth (preference given to those working with underserved communities)
- Benefit from a mentorship to grow the work that they are currently doing

Outcomes:

- Project or research that is developed by Champion (deliverable).
- Still not sure how to measure student success—possibly the number of students served by the Champion that go into Cyber Security as a major/minor or go into Industry out of high school.
- TBD

There are still a lot of questions and details to work out, but I believe this is a strong start to the discussion of the need to include and support the role of the Champion who sometimes do not fall into traditional titles and therefore is not supported to continue the work that they do. Access, opportunity and support are the key factors that I feel are lacking for Champions currently. Many Champions have managed to navigate and find a way despite the lack of real direction and support, but I propose that there is a way to provide that support. I believe a program such as the CybSec Champion Fellowship could be valuable as one approach to address the need to educate and help the direction of cyber security.