We are A team!

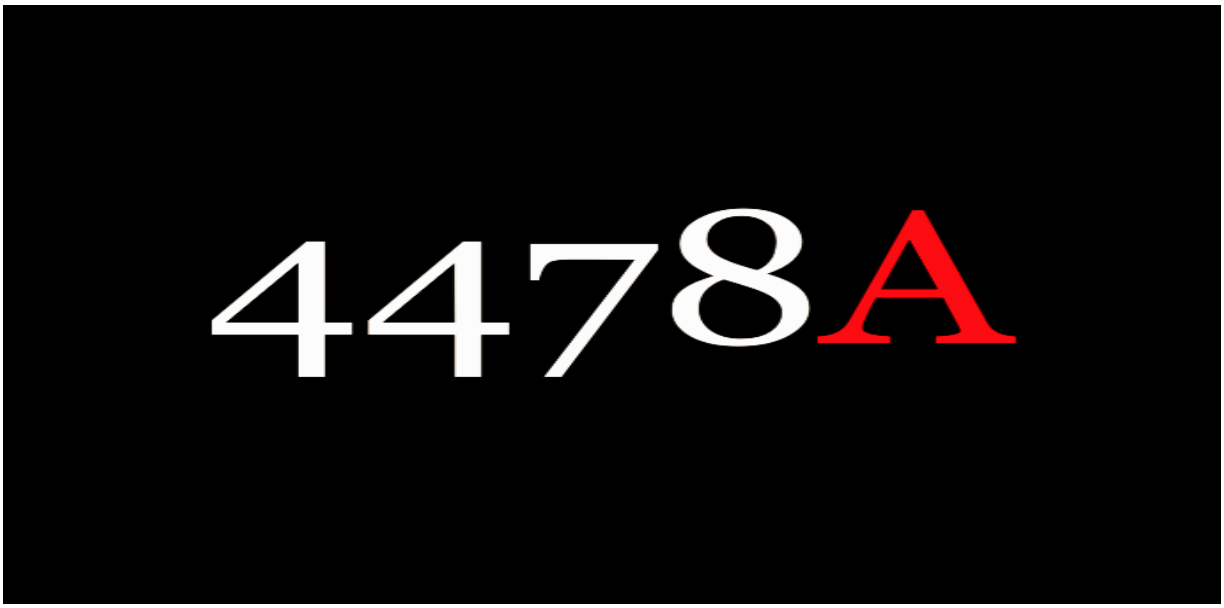
Manushri Anand
Duha Barkana
Jordyn Chymbor-Souza
Natalie Luff
Isabella Schroeder
Phuong Tran

4478A

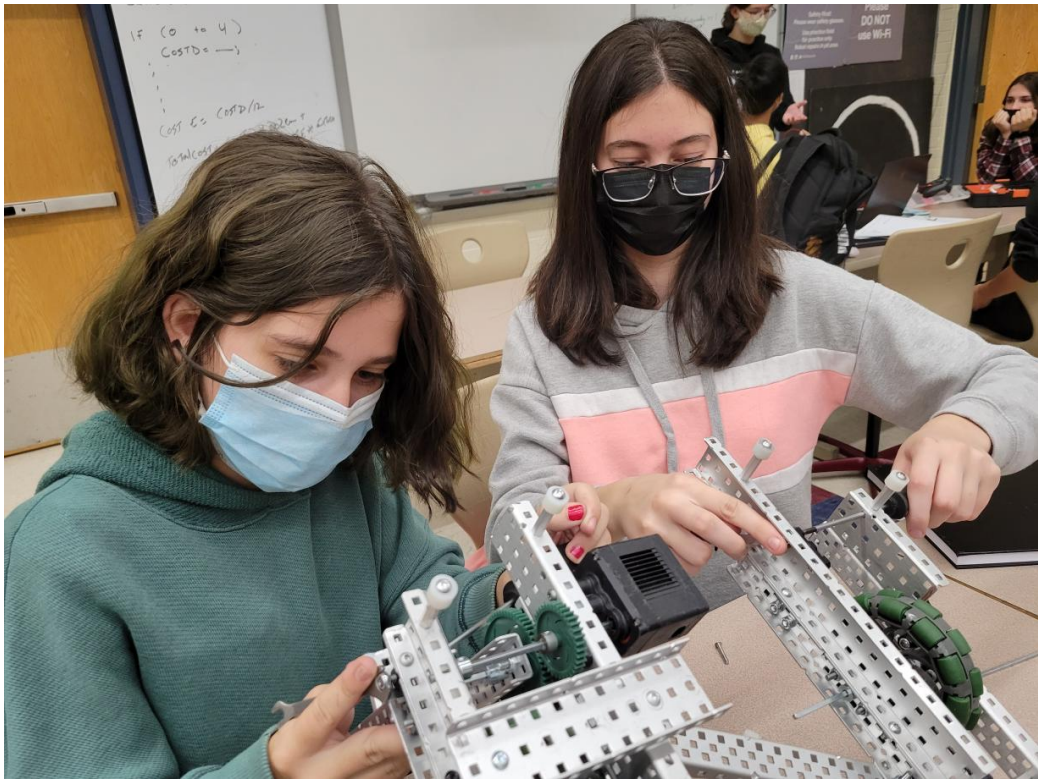
Masuk High School
Monroe, CT

People often say that the four years in high school are considered the “golden years” for young people. This is precisely why it is the time for us to find ourselves and mature from little girls to young women because we will not be children forever. In Vex Robotics, the ratio of males to females is very skewed, with males mostly dominating the club. Although we are fortunate enough to be an all-girls team and have people around to connect to the struggles we are going through, it will not always work out that way. Therefore, we must be able to communicate within our team flawlessly and work through any problems that may arise, which is in of itself an incredible accomplishment we seek to achieve. However, that doesn’t mean we ought to limit our connections to only each other. Inside and out of robotics, we strive to become a team of confident women filled with passion, bravery, and cohesion.

We are 4478A.

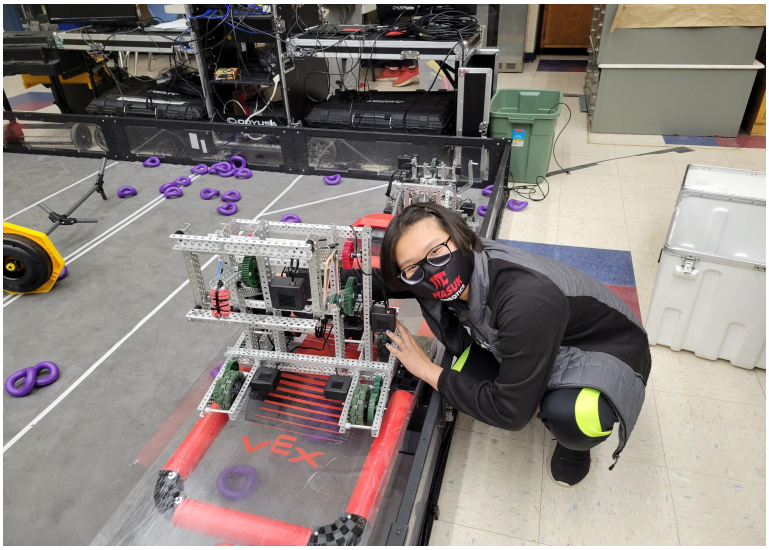


"*Girl power*" is a term often debated upon, with many denying its importance in the modern world. Others use it to justify extreme actions, thinking that it means women should dominate over men, or that it should be some sort of lifestyle. In our opinions, the term "girl power" is not a way of life nor something that should be understated; instead, it is a form of encouragement, a concept that should be brought to light but not taken advantage of. "Girl power" should simply be about giving women the confidence to fight back when others push them down and ignore their voices.



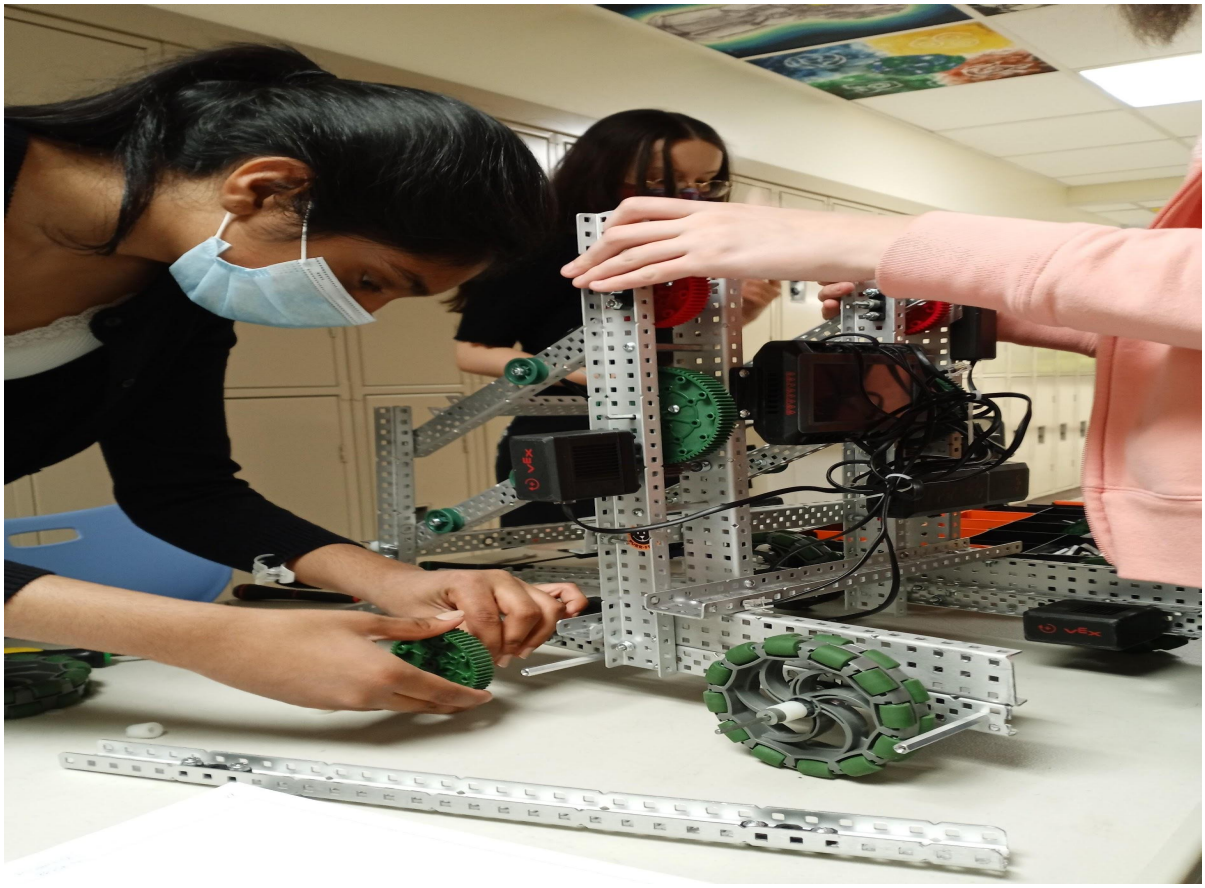
10/20/21: Isabella and Jordyn stabilizing the chassis.

Robotic competitions must not be a place that makes one feel dread because they are uncomfortable with the atmosphere or other competitors. In our team, we constantly strive to make each other feel comfortable as well as those not from our team. Like an umbrella in a storm of rain, we try our best to defend other women from the torrent of water drops that hammer down upon them. Girl power, in the context of STEM fields, is about righting a historical wrong. It is about assuring other women, who have been barred from pursuing their passions, that there is a future for them in any field of their choosing. Our team is able to demonstrate this through our dedication to Vex Robotics and growing abilities in fulfilling our roles on the team.

Our team at competitions
Picture 1: The Drive Team - Jordyn, Isabella, Natalie. Picture 2: Tran

If one wants to be able to work and *excel* in a club, they should not limit themselves to only a certain group of people. Through our experiences, we have seen how open-minded people are able to adapt to the environment and shine at their workplace. 4478A strives to become leaders of an inclusive environment. Our number one policy is respect: not only for fellow team members, but for the other robotic teams, judges, classmates, family, and others we see in our daily lives. Respect travels a long way: we believe that every bit of consideration we show to others will advance with them in their own lives. Listening to others' ideas may be valuable in solving an issue we are having with the robot. Additionally, 4478A, under no circumstances, discriminates towards anyone. Hateful attitudes within the team only serve to foster a negative environment, undoubtedly impacting our field performance. Respect allows us to enjoy robotics and look forward to all it offers. If people see our team act this way, we believe more people will be inclined to follow our lead, creating a healthier environment.

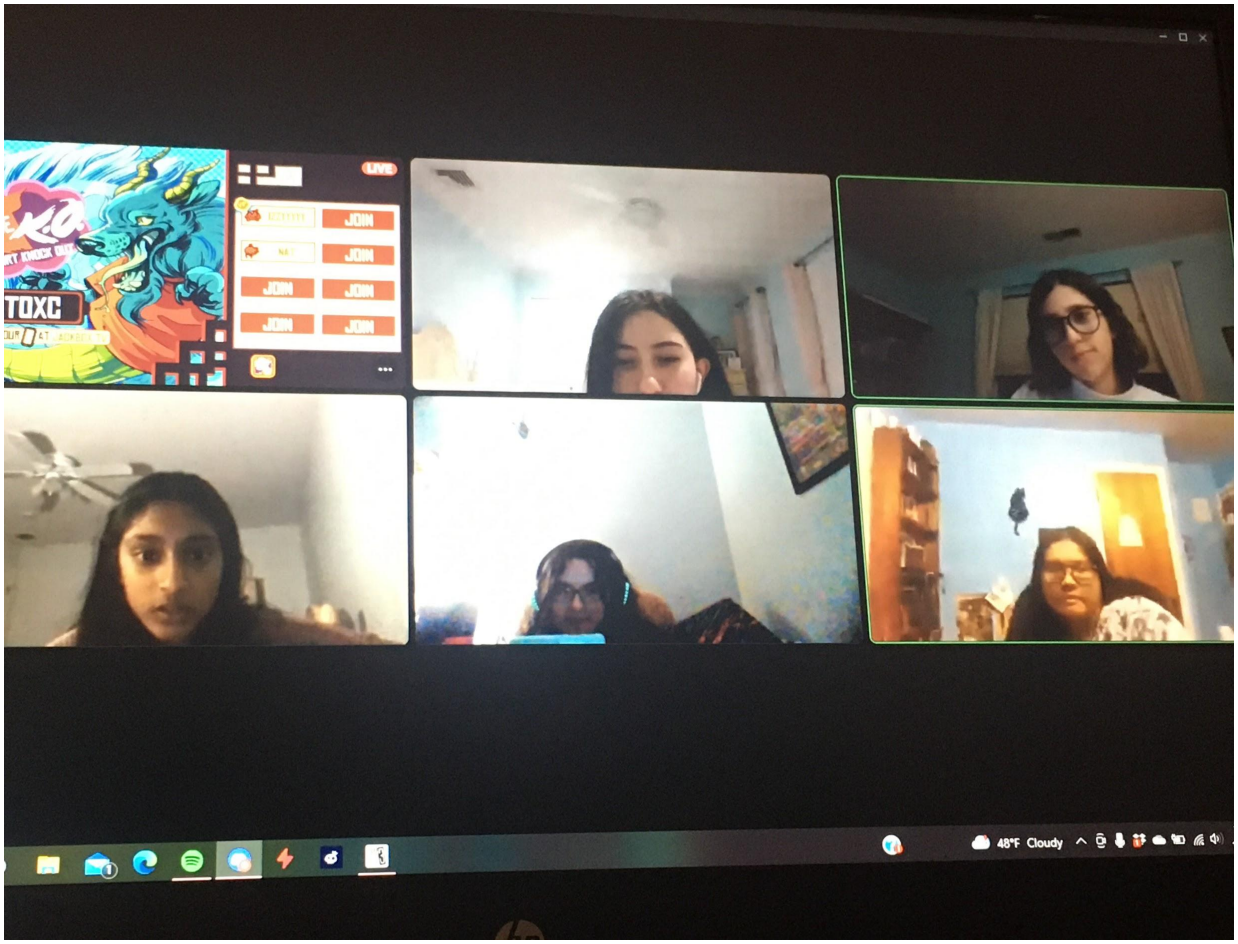


11/10/21: Manu working on the chassis. Isabella and Duha work on the lift.

4478A contains six members who are all skilled in their own fields. We have a new addition to the team, **Phuong Tran**, who is working under the builders to introduce herself to the robotic experience and learn valuable skills; she also documents progress on the Engineering notebook. Our two year member, **Isabella Schroeder**, assists in the building process of the robot. Recently, she has adopted driving and has fallen in love with it, becoming our co-driver next to **Jordyn Chymbor-Souza.** In addition to driving, Jordyn programs the robot and builds. She is the youngest member who contributes to numerous fields: an ambitious individual eager to expand her horizons and learn from her faults. Programming alongside her is **Natalie Luf**, a talented woman who is fascinated with computers. She finds interest in testing her autonomy. The veteran members of our team are **Duha Barkana** and **Manushri Anand**. Both have participated in robotics competitions since childhood and continue to enjoy the environment. Duha is the main builder of our team. With her precise drawing skills, she creates intricate designs for new robot ideas and incorporates them onto the bot with the help of the other builders. When a design appears to fail, she rebounds and creates a more efficient one.

Manushri is a builder who uses her experience to formulate new ideas and help the newer members adjust to Vex Robotics. Additionally, Manu helps to moderate the team: she ensures that every individual on 4478A can voice their opinions in the loud work sessions. At the beginning of the year, no one knew what their main role on the team would be. However, after experimenting with different responsibilities, each member found their own passion on the team. 4478A would not be complete without any one of these members.

With all the different people on our team, we are able to have more insight on the robot. Our bot is not the creation of one person's efforts, but the product of multiple people's hard work. We constantly strive to come up with new and improved designs to implement - we don't know what we'll face in our next competition. We cannot afford to stop offering ideas because new ideas are priceless: they can make the big differences that allow us to take a step further and enable us to stand against stronger opponents. In addition, by listening to each other's opinions, we can all grasp a sense of what our team members are like, bringing us even closer to one another. We have a sense of unity when we agree on a certain design and work together to bring it to life. 4478A is one team, composed of people who experience the same situations and help one another to overcome them; the confidence we gain from each other is immeasurable. We always try our hardest to encourage those we come in contact with, even if it's with a "Great job!" after a match.



11/04/21: Team Bonding

Although unfortunate, it is common for girls in robotics programs to settle for roles they don't want. In our experience, several of us have been the sole contributors to the engineering notebook - not at the fault of coaches and advisors; not because we're incapable of building or programming - but because of an unwillingness to speak up. One of our main priorities on 4478A is to break this cycle by encouraging our team members to try new things and express their thoughts and ideas. Anyone is capable of excelling in robotics if they're simply given a chance to do so.

As we look back into history, we can view how women expanded their own fields, fought for greater rights, and sought out new opportunities. A prime example is **Hedy Lamarr**, who is someone we all admire. Lamarr was an actress who lived from 1914 to 2000, famous for her parts in early 20th century movies. In addition to being a Hollywood star, Lamarr discovered "frequency hopping" devices that significantly helped the United States in using precise torpedo strikes. Lamarr's frequency hopping would be later used to develop Bluetooth and Wi-fi, inventions that are crucial in today's world. Lamarr is a role model to women in STEM - a prime example of how a woman can be "girly" and still change the world with her inventions. She exemplifies how women are not one-dimensional, and can have a variety of talents. Most importantly, it conveys how you can achieve your goals without sacrificing your character.

Using these ideals, we have formed our team, focusing on empowering each other. Since September we have been 4478A. Through our many struggles, we managed to emerge victorious together. Despite our difficulties, we've persevered through them to form a strong team bond. We're ready to face our challenges together.

Bibliography

"Hedy Lamarr". *Biography*, 2022. Accessed 17 Jan 2022. https://www.biography.com/actor/hedy-lamarr

"The Hollywood Star Who Helped Invent Wi-Fi - Google Arts & Culture". *Google Arts & Culture*, 2022, Accessed 17 Jan 2022. https://artsandculture.google.com/story/the-hollywood-star-who-helped-invent-wi-fi/vQXxS0S6j033pQ?hl=en .