

BROUGHT TO YOU BY // CAUTION TAPE // TEAM 8932 LOCATED IN MARKHAM, ON, CA WRITTEN BY : SERENA, BRIALLYN, JAMES, BRANDON, AND HAYDEN

GIRL & POWERED.

Topics include :

Girl Powered, what does that mean to our team?

How did our diversity help achieve our current status and help the team?



What we've learned from our experiences with each role.



Who is our stem role model and how have they led us in our journey to further our team's diversity?

GIRL POWERED, WHAT DOES IT MEAN TO OUR TEAM?

When we think of girl powered, we think of women who have paved the way for us to be introduced to STEM and have opportunities to explore different STEM-related career pathways. In our team, all teammates have equal opportunities when it comes to building, coding, and CADing. Our coaches teach all of our



teammates every aspect of robotics, so they all have the option to choose whichever role they want and further themselves in that area. Although we praise women who came ahead of us with the name girl powered, we also think of the future generation of girls in power. Learning STEM (Science, Technology, Engineering and Math) through robotics allows us to be more advanced in certain subjects, and because of our amazing organization, our team and our sister teams are presented with the opportunity to teach other girl powered teams. We love being able to do this because we can empower more girls and hopefully aid them on their STEM journey.

The diversity we have on our team is the biggest reason why we are able to achieve the status that we have today. Diversity plays a huge part in our robot design because we have members of different ages and different experiences so although someone can have more experience, they might not think of the same idea as someone who just joined.

Our diversity also helped our team bonds and friendships. Although the sound of having both girls and boys on the same team might sound like they have difficulty getting along, we find that our team doesn't struggle at all. We occasionally have game nights as well, where the boys get absolutely demolished by the girls and feel their ego's crumbling to the ground whilst the girls rejoice with their amazing skill and talent. Having both girls and boys on our team allows our team to have more perspectives on strategy, which has led to our current robot design and autonomous routes. In conclusion, the diversity in our team has created a friendly environment in which all members can enjoy their time, on top of being able to create great designs and strategies.

> HOW DID OUR DIVERSITY HELP ACHIEVE OUR CURRENT STATUS AND HELP THE TEAM?

In our team, the roles are mostly divided, but all members must have the ability to code, drive or build in case our driver/ main builder/ coder isn't present. Our coaches organize sessions where we drive the robot for a minute and try to score as many points as possible. They also give us advice on how to improve and what we did well, so we know what to do for a

better score next time.

Although coders can build, they find it to be difficult and occasionally irritating so they choose coding, even though it's just as irritating (or even more so). Builders, though they can code, they prefer to use their time designing and

We all have the opportunity to code as well as build, either pathway you choose, you should still be able to do the other one to a certain extent. Whether it's to help build the robot, or touch up loose ends, coders are able to help, and vice versa, builders are able to download and edit code.

In spite of that, when builders learn code, they realize how

building because they find it to be more interesting.

difficult it is which allows them to be more understanding of the time it take to code auton or the robot in general and allows them to make smarter decisions time wise in order to make sure the coders have enough time to finish auton routes and other tuning. This also works the other way, coders understand the thought and time that goes into building and acknowledge that they won't have a new robot immediately so they tend to help builders when they themselves have no code to work on.

WHAT WE'VE LEARNED FROM OUR EXPERIENCES WITH EACH ROLE.



In order to have created a girl powered team, we specifically reached out to girls who wanted to try out STEM related extracurriculars. This allows our team to be more inclusive and it provides opportunities for girls to learn about non-traditionally female allocated roles such as building and coding. This is what team 839Z wants to promote, inclusivity. Even if you're completely new to robotics (as many on our team are), you're still just as beneficial to the team and it doesn't matter which gender, race or sexuality you are either. All of our members work hard to ensure that our environment is an inclusive and safe space.

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Our STEM role model is famous physicist Chien-Shiung Wu, a Chinese woman who made several contributions to nuclear physics. She worked on many projects and was included in the top- secret Manhattan Project, where she helped produce and make nuclear weapons. She is known as the "Chinese Marie Curie" or "The First Lady of Physics" because of her many contributions in the field. Although she's Chinese and a female, she still got a degree and traveled to America to further her education. Her determination to become like her own role model, Marie Curie, is the reason why we see her as our role model. She accomplished something phenomenal and didn't let her gender nor race hold her back from doing so.

> She inspires the girls on our team to further themselves in STEM even though it's not a "female job". As most of our team is Asian, she also inspires us to reach for our goals no matter the race. Madame Wu inspired us to have an inclusive team because she demonstrates that no matter the gender, race or sexuality, anyone can make an impact.

WHO IS OUR STEM ROLE MODEL AND HOW HAVE THEY LED US IN OUR JOURNEY TO FURTHER OUR TEAM'S DIVERSITY?

Dr. No

TEAM & CREDITS :





HAYDEN CHEN



BRANDON LIN

JAMES DING





BRIALLYN QUAST

SERENA LIU

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