

Shriya Ravipati

8th Grade

Team 92620D

## Inclusivity

As a kid, I remember watching rocket launches on T.V. I was fascinated by the clouds of dust blowing out beneath the rocket and seeing it fly away into space. I always wondered what it would be like to see Earth as a tiny sphere and be surrounded by stars. That was the beginning of my curiosity in STEM.



The phrase “girl powered” to me means including not just women, but everyone and using the power you have to make a difference. It can be in robotics and technology, or it can be to help people.

For 4 years I took part in a club called WE Club, an organization that helps people, because I wanted to contribute to my community. I volunteered for activities such as valet, beach clean ups, and canned food drives. We even did clothing drives, sock drives, and penny drives. This helped me get perspective on the struggles that people have to go through.

By the time I was in 6th grade, all of my work over the years added up to give me enough credits to go to WE Day. I was inspired by celebrities like Selena Gomez, Skai Jackson, Joe Jonas, and Meghan Trainor who supported the act of giving and including everyone.



At WE day, I heard a story about a young girl in Africa who loved school and loved to learn, but her father told her that she had to quit so that she could do chores. His mindset was fixed to thinking that girls have to stay home. Instead of giving in, she faced all her challenges and completed her chores at night so she could go to school during the day. Through her stubbornness, her father realized how passionate she was and agreed for her to go to high school. In the process, she laid a path for other girls to

follow their dreams. She demonstrated girl power by changing her father's opinion about girls. It was very inspiring to me and I realized that I too had the power to pursue my dreams and make an impact.

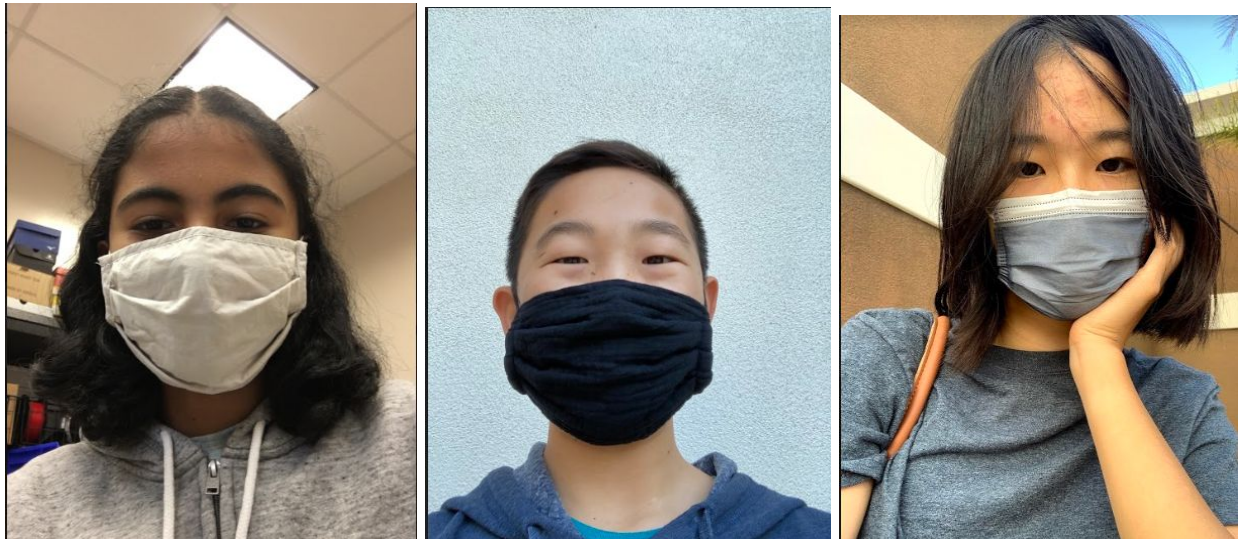


Our team has made an impact in closing gender gaps in the JTMS Robotics program. During the first year of JTMS robotics, there was one girl and six boys because robotics was perceived as a field for men. After seeing the unbalanced team, our club members and the teachers started to bring change in robotics by spreading awareness about the club and encouraged everyone, especially girls, to try out for the team. As a result, there are five boys and six girls this year. The encouragement worked, and the team is balanced this year.





To make the best use of everyone's skills on our team, we split the responsibilities. Ethan is our lead builder and driver, and he helps out with the notebook. Joanna is our notebook manager and she helps with the building as well. I am a programmer, and I also built the lift of our Change Up robot. I had to build it and rebuild it multiple times, and I felt very frustrated that things weren't going my way. My team members encouraged me to keep going, and motivated me to stay positive. I was able to successfully complete the build because of them. By taking on multiple roles, we not only learned a lot and helped each other, but we also became a stronger team.



Working in a team taught me how to collaborate with everyone, and how to work efficiently. I learned a lot about teamwork and how everyone's ideas are valuable.

Our team is made up of people from various backgrounds. We all view things differently which helps us determine if our ideas for our robot



would actually work. This helps us build a successful robot. If you have the same type of people on a team, they might overlook a flaw that another person would have caught. For example, we had initially planned to use 200 RPM motors for our robot. But as I started thinking about it, I realized that our lift wouldn't be strong enough to carry the ball with a 200 RPM motor. We changed it to a 100 RPM motor for more torque and our lift successfully works. Without that different perspective, we would've had to take apart the robot to change the motor.



Our number one rule at JTMS robotics is to be kind no matter what. Anybody at our school is welcome to try out for the team, and we make sure that everyone feels included. When we brainstorm ideas for our robot, we don't always agree with each other, but we always make sure that everyone's perspective is heard with an open mind before making a decision.

Not everyone was accepted with an open mind in the 1900s, like Katherine Johnson, Dorothy Vaughan, and Mary Jackson. The three women that the movie *Hidden Figures* portrays. The film is a true story about three African-American mathematicians who computed by hand and mind what computers could not at NASA.



Since they were women of color people didn't think they were smart enough to work at NASA, so they were always kept in the background. But they never gave up on their dreams. They conquered the barriers that their gender and skin color caused them, and ultimately were recognized for their work. They really demonstrated girl-power because they defeated all their obstacles and used their skills to make an impact at NASA. I was inspired to use the power I had to make the world around me a better and fair place for everyone.

Credits: Shriya Ravipati, Ethan Lai, Joanna Peng

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