



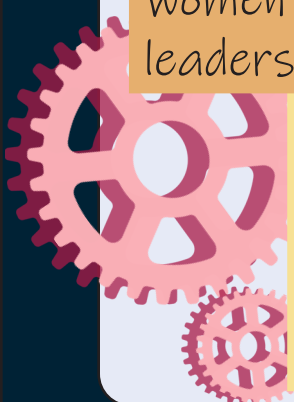
BEYOND 18 INCHES

"'Girl power' is confidence. 'Girl power' is independence. 'Girl power' is dominance. We can all work together and prove that women are worth to be recognized and valued." - Chia-Shuan Yeh

"'Girl power' means encouraging other girls to never give up. It means cheering for their hard work and success. It means working together and creating a friendly environment. It means knowing that you are strong and capable and that you are the best version of yourself." - Madeline Lee

"'Girl power' symbolizes the strength, power, and independence of women. Every woman should be recognized for their worth. No one should be held back because of their gender and be ashamed of being a woman." - Alicia Wang

"'Girl power' is not simply a phrase that represents the new generation of women; it is a symbol of our creativity, resilience, and potential. Unconfined by societal norms, women will redefine their roles in society and become leaders of change." - Charlene Chen



"'Girl power' is not only a slogan that women made up to support and encourage themselves, but it is also an honoring for women's empowerment and having girls and women feel confident with their new-found strength." - Kerrianne Chiu

MEET THE TEAM !

4253A



ALICIA WANG

Since Alicia was young, she had always loved playing with Legos and programming robots. She joined her school's VEX EDR club in 7th grade as a non-competitive participant. Since she enjoyed her experience in 7th grade, Alicia continued in 8th grade as a member of Team 4253A. She is the programmer on this team and occasionally helps with the building process. Alicia is planning to continue doing VEX throughout her high school years.



CHARLENE CHEN



Growing up under the influence of her older brother, Charlene began to gain interest in the field of STEM and robotics throughout her middle school years. In eighth grade, she joined the VEX EDR club with her friends as an engineer on an all-girls team. Going into high school, as her passion for robotics grew, she continued to participate in VEX to pursue her goals in the field of STEM.

CHIA-SHUAN YEH

In Chia-Shuan's freshman year, she joined Team 4253A as a journalist because she is more experienced with drawing and sketching. After her first year in VEX, she learned how to journal as an engineer. She also had an opportunity to understand the amount of effort that needs to be invested in building a successful prototype. She has had great two years as a VEX 4253A member and looks forward to working with her team in the future.



KERRIANNE CHIU



After continuous involvement in robotics outside of school, Kerrienne joined VEX in seventh grade, simply wanting to try it out and have fun. The passion for robotics turned into a competitive zeal when she, alongside other friends, got together with equal passion and skill to form an all-girls team a year later. Despite difficulties and challenges when it comes to competitiveness and complex designs, Kerrienne has never lost sight of the goals she has set out for herself and her team.

MADELINE LEE

Madeline joined the all-girls vex team in 9th grade. Having an interest in building things ever since she was young, she joined the team aiming to become an engineer. In the end, she became a driver because she also has experience driving remote control toy cars and got the hang of driving VEX robots rather quickly. She was still able to help the team with building when they needed help. However, her main role in the team is being the driver.



A LEARNING EXPERIENCE

Through the process of trying various roles, such as building, programming, and designing, each member learned about what it takes for one to complete a specific job. For example, in eighth grade, we spent most of our time building the robot, so the programmer did not have enough time to program for the autonomous period.

This also left the driver unfamiliar with the robot. The lack of preparation greatly affected our performance in the Robo Rumble Competition



in 2018. We tried to work collectively as a team to figure out the best way to solve this problem. From that trip, we learned to stop building when necessary because it is impossible to build a perfect robot. Thus, before leaving for the Robo Rumble Competition in 2019, we made sure our driver and programmer had enough time to practice and code. As a result, our autonomous points and driver skills improved.

DIVERSE PERSPECTIVES AND TEAM CHEMISTRY

In STEM, boys' opinions and achievements are often more valued, while girls don't receive as many opportunities or recognition. Sometimes, as seen in other mixed-gender groups in our school, girls are confined to the role of "journaling" or "scouting", automatically assumed to be incapable of taking on roles that contribute to the robot design directly. As a team of five girls, team chemistry is significantly important when it comes to communicating amongst teammates.



Rather than having one person dominating the whole process, we strive to work efficiently together, divide workload equally, and

provide diverse perspectives to improve our robot. Less influenced by past designs of other robots, our teammates who joined the team last year were more likely to think outside the box and come up with more creative designs and solutions.

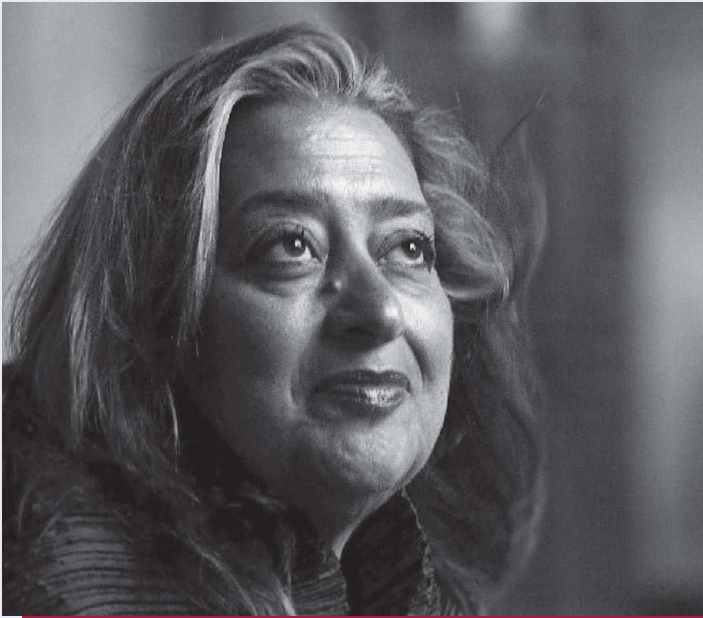
When we encounter challenges during build sessions, the importance of communication is the most prominent. By having each of our teammates speak up, we base our solution on the ideas that may help improve the robot. Our team chemistry and dedication ultimately helped us win the 2019 Design award in Manila. Leading up to



the competition, we discussed the details of the robot design with Chia-Shuan, our journalist, while she worked on the sketches on the VEX notebook. Through this process, we are able to stay organized and on track as we evaluate our work at the end of the day.

ROLE MODEL - Dame Zaha Hadid

Dame Zaha Hadid, a role model that we look up to, was a renowned architect best known for her utopian and radical-contemporary designs. Her buildings include the Heydar Aliyev Cultural Center in Azerbaijan and the Vitra Fire Station in Germany. She was entrepreneurial and ambitious and earned her title as the world's leading female architect. She was



the first woman to be granted the Pritzker Architecture Prize in 2004, and the honor and recognition of that prestigious award solidified her as the epitome of female empowerment in the design world. When

asked about male-dominance in her field, Hadid said, “I am sure that as a woman I can do a very good skyscraper... I don’t think it is only for men”. This is one of the many reasons why Hadid is our role model. She’d recognized misogyny and gender bias worthy as challenges and spent decades battling them. She frequently faced discrimination as a woman, but was resilient and determined, making a significant impact in the world of design.

TAKING INITIATIVE

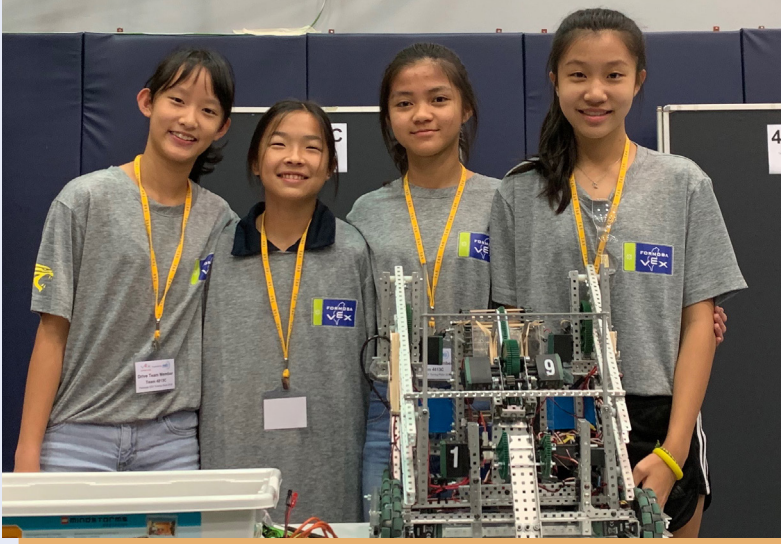
Team 4253A is one of the first all-girls teams in our school to participate in VEX competitions continuously throughout middle school and high school (8th, 9th, and 10th grade). During our first year

of VEX in 8th grade, we didn't succeed as much in competitions. Nonetheless, we never gave up and continued to try. We built and rebuilt, continuing this process over and over again. It was really tiring and frustrating, but we pushed through and kept this team together, gradually becoming better throughout the years.

After our first year, we decided to continue doing VEX and told each other that we are going to do better next year. We showed our hard work and got recognized by the robotics teachers. Because of our determination, our school helped with promoting our all-girls team by putting up posters around the school. After our team managed to persevere through 2 years and even win some qualifiers, some girls started asking to join our team and



The school put up this picture in the hallways as a way to promote girls' involvement in STEM.



others created their own girls' team. For example, in 8th and 9th grade, there weren't a lot of people who participated in VEX. However, in 10th

grade, another all-girls team and mixed genders team joined VEX. In a way, we showed them that girls can also be involved in robotics.

GIRLS ARE POWERFUL.



BEYOND 18 INCHES

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