

Girl Powered - REDEFINE

Team 507B - Mustang Robotics



Introducing 507B

Meet 507B



Jiayi Liang
Manager



Jacob Ursua
Engineer



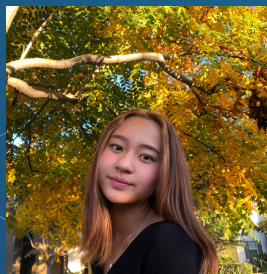
Sofia Pantoja
Engineer



Andrew Lai
Engineer



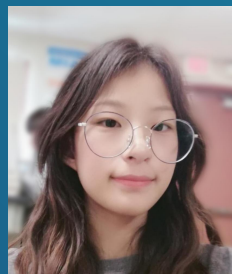
Keiko Vlaming
Manager



Faith Shin
Programmer



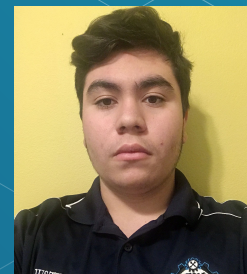
Brian Helewa
Manager



Euphony Zhou
Engineer

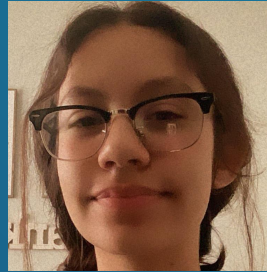


Keenan Mendoza
Engineer



Justin Diaz
Engineer

Meet 507B (Part 2)



Samantha Rodriguez
Programmer



Woojin Lee
Engineer



Sean Yeow
Programmer

507B is comprised of a diverse group of girls and boys that work in unison to efficiently complete various tasks, compete in VEX Robotics, and REDEFINE gender norms in STEM.

Girl Powered - REDEFINE

**Remember
Everyone
Don't
Ever
Forget
I
Need
Equality**

REDEFINE is a statement that reminds Mustang Robotics about the meaning of Girl Powered. We believe that men and women should be seen as equals at all times and that should never be forgotten. As gender will not change someone's drive to explore, work, and learn about anything, especially in STEM, you will see in 507B, both girls and boys getting along as they work together on the robot, programming, and recording the engineering process. Specifically, on our team, we do not permit any member to belittle someone else, especially about their gender or other differences. Instead, we empower our members to support everyone and see this support as a benefit for the whole club.

Perspectives:

As our team has a well-rounded group of individuals, we have been able to receive different inputs and perspectives for our designs from everyone. This is all thanks to our group listening to everyone's thoughts as a valid option in our endeavors. By doing this, we haven't overlooked any portions of the game and through multiple perspectives, we have been able to discover the most efficient path of action. In other words, with a mix of people who all have an equal voice, we can always find the different sides of a problem and come up with the best solution together. To ensure this inclusive team dynamic, 507B has open communication so no one feels scared or ashamed when voicing anything on their minds. At this point, as we reflect on our experiences on this as a team, we have realized that diversity is arguably our biggest strength. Even during these difficult times with COVID 19, our diversity has resulted in a strong team bond that has allowed us to continue moving forward together. Our team is like our second family that we can always rely on to accept and care about us, a group of equals who care for each other.



A normal day of team dynamics and everyone working/planning for the season (this was from last year as COVID 19 is occurring).



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Journey Through Mustang Robotics

Joining Mustang Robotics

To join Mustang Robotics, we hold a three-part tryout for all students. The tryout process includes an application form, two days to try out any of the 3 positions, and an interview portion with our alumni. The students admitted to our program are the ones who display their drive, a strong character and have teamwork /inclusive skills. We observe their interactions with each other and look for those who not only have passion but also respect everyone's unique perspectives. In addition, although we are unable to accept everyone into our program, we welcome everyone to try again next year for another opportunity to join and to come to our competitions to learn more about our program. Thus, through our tryout process, we identify those who best express the Mustang Robotics ideology and as a result, our teams end up as a diverse group of extremely intelligent and inclusive people, who REDEFINE social norms by respecting everyone with an equal voice and opportunities.



This picture shows our applying process where we not only look for the best students but also look for the men and women who show an inclusive and caring nature that will make the team the most welcoming and fair to all participants.

Being A Mustang

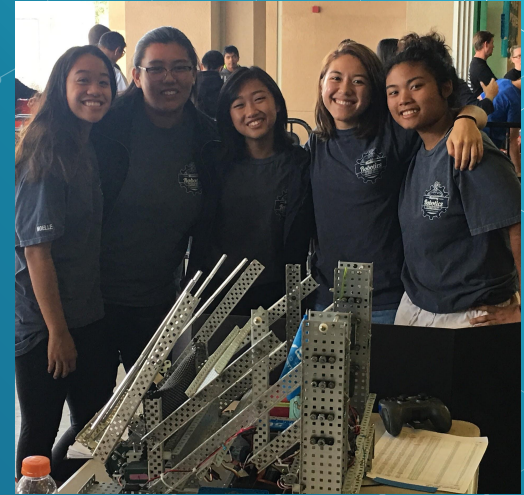
507B redefines social norms and promotes women's participation in STEM in hopes that one day, women and men will be treated as equals by giving members of any gender equal opportunities to have any position they wish to explore. We are proud to have an almost 50:50 ratio between guys and girls in our team. This is especially shown in our gender unrestrictive team roles as we not only have multiple female engineers who design, test, and perfect a robot but we also have both female and male programmers, who work together in creating the best code for our robot to move the most efficiently. In addition, we also have a mix of both girl and boy managers. They keep our team on schedule, practice mock interviews, and have a larger role to play when facilitating the documentation of our team's engineering process. Managers are specifically in charge of notebooks but they include everyone from all positions to write in the notebook. No matter your gender or position everyone will be allowed to explain their unique perspectives of a situation or design. Thus, even though members try out and receive a role on the team, they are never limited to just that. This is because, in 507B, we believe that everyone should have an equal chance to discover their passions and have a positive impact on their team.



Members of 507B expressing their teamwork and inclusion of all in their team dynamic. (This picture was from last season but these current 507B members would continuously show their team dynamic if we weren't in the middle of COVID 19).

Life After Robotics

Throughout a member's journey in our team, they soon get comfortable with the idea of showing respect to both the girls and boys on our team. In 507B we are all able to experience the team dynamic when everyone sees each other as equals, and this journey stays with Mustang Robotics members even after they graduate. Many alumni, especially the past ladies Mustangs, have returned and told us about the struggles they have faced as they continuously strive to succeed in a men-dominant field.. They have given us wise advice, that if we ever face someone trying to belittle us we should stand up for ourselves and prove through our work and dedication that we are all equal. They have also explained to us that in many companies, we could find support through friends in the female groups at companies who constantly encourage each other to never give up (similar to the group's interactions from Mustang Robotics). Through these discussions, we have learned that our team has encouraged inclusiveness not only during high school but also after, as our team has created a lasting impact and social change beyond VEX Robotics.



This picture shows a group of our past alumni who have expressed Mustang Robotics ideology perfectly in regards to Girl Powered.



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Role Model

Role Model

Our team's role model is Ellen Ochoa. Many members of our team look up to different STEM figures, but we were all inspired by Ellen Ochoa, the first Hispanic woman to travel to space and the second female director of NASA's Johnson Space Center. Our proximity to the Tijuana border has led us to be surrounded by many Hispanics. Thus, the members of 507B and the girls especially were able to relate and look up to her as a trailblazer for Hispanic women to pursue careers in space exploration. As we discussed more about her life and the difficulties she faced, we realized that no matter the obstacles ahead of us we should never give up on our dreams. Ellen Ochoa is living proof that you can accomplish anything, even in a men-dominant field, if you are willing to give it your all. Ellen inspired us and especially the girls because a fellow woman was able to accomplish so much and pioneer a path for us to follow or even surpass. All the girls on 507B understand that in VEX Robotics, we shouldn't be scared or intimidated by others that might tell us we can't do something. Instead, we should work hard and continue to learn, so one day, we will have the opportunity to realize our dreams. Ellen has shown us that our dreams are limitless as long as we keep learning and never give up. Who knows. Maybe one of us will become the first women on the Moon or even Mars, the possibilities are unlimited.



"Usually, girls weren't encouraged to go to college and major in math and science. My high school calculus teacher, Ms. Paz Jensen, made math appealing and motivated me to continue studying it in college." - Ellen Ochoa



Credits For “REDEFINE”

Title: REDEFINE

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