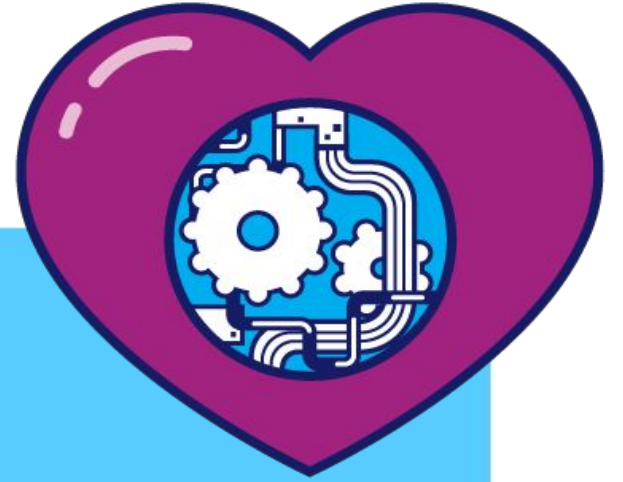


5 3 2 7 Z

GIRL

POWERED



Diversity. Inclusion. Girl Power.



Empowering girls one cube at a time.

In 2015–2016, women of color earned the smallest percentage of bachelor's degrees in STEM fields:

5.0%

Asian Women

2.9%

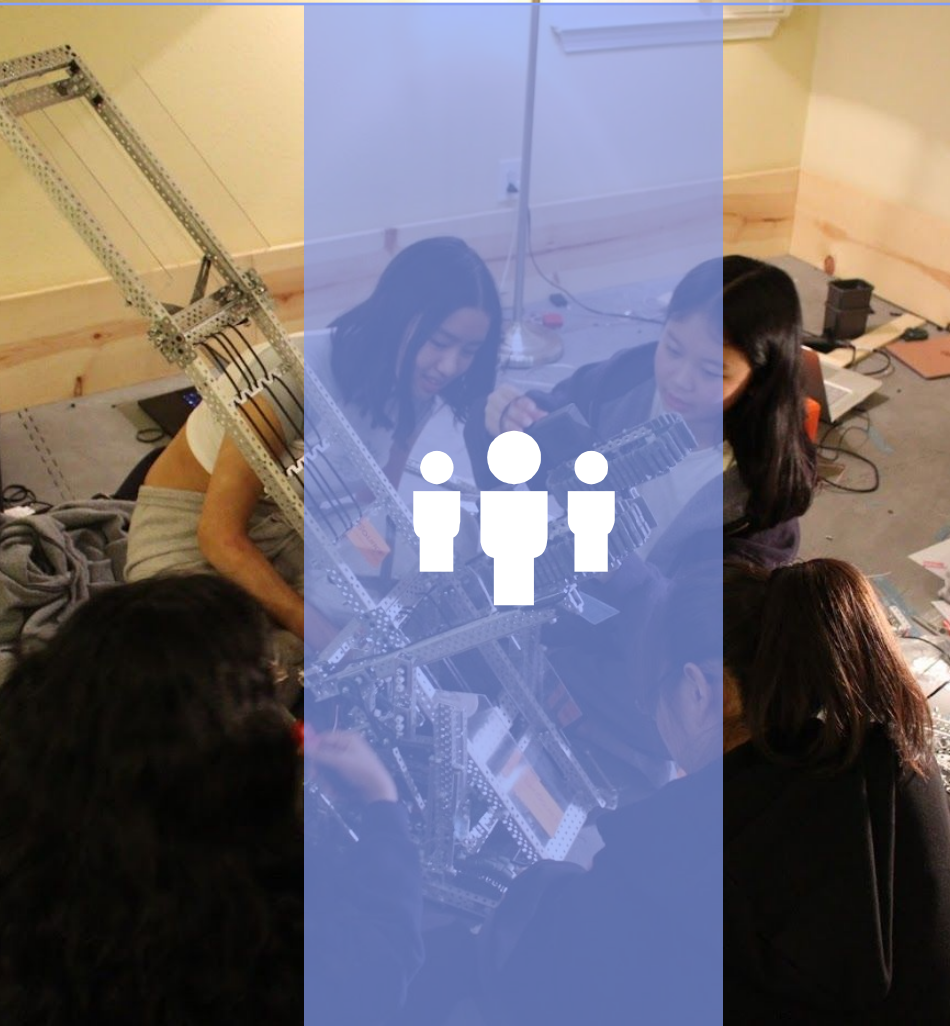
Black Women

3.8%

Latinas

As a team, we hope to help increase these percentages by spreading the reach of robotics and STEM to more females

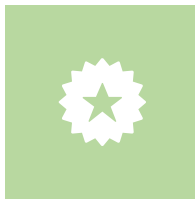
What Girl Powered is About



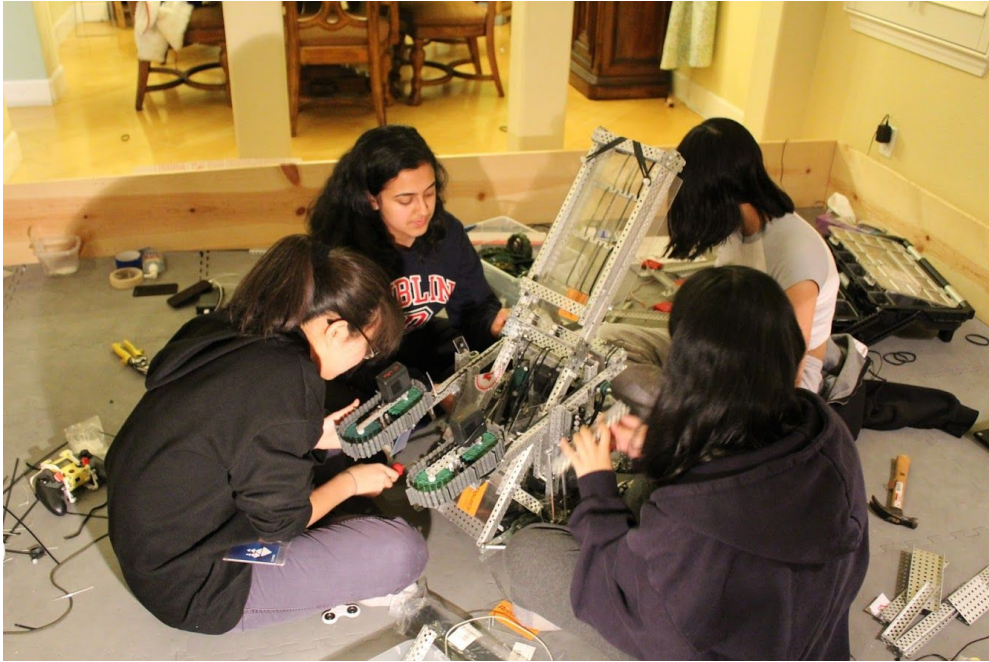
GIRL POWER: Women can flourish in STEM - she just needs the opportunity.



Though countless innovations have been made in engineering and robotics in the past years, women have only recently been given the chance to participate in the STEM field. "Girl Power" to us means inclusion and empowerment. Team 5327Z takes pride in its **1:1 female to male ratio**. Because of the diverse backgrounds of each member, we have been exposed to different perspectives. This has maximized our team's potential. Over the course of our season as our team has bonded together, we developed, not a true definition of "Girl Powered," but an idea that has enabled every single member, especially female members, to feel **empowered and confident** in their abilities, ultimately allowing our team to foster an inclusive and welcoming learning environment.



The Origin: Forming our Team

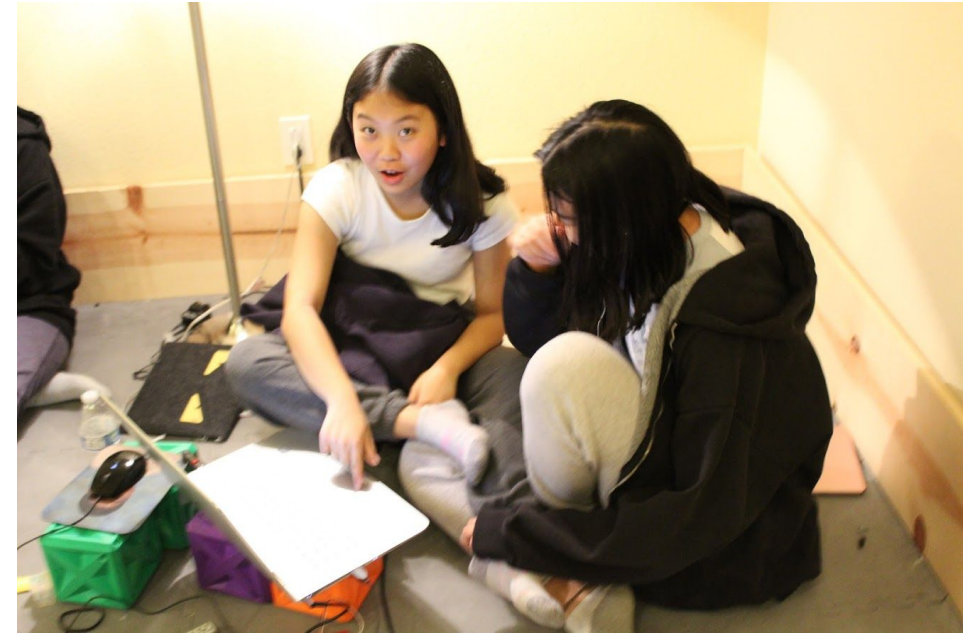


Even though the society has greatly progressed to become inclusive, the STEM field is still perceived to be male-dominated. However, as the next generation of students in STEM, we wanted to be the change we wished to see. When our team was forming during the beginning of the season, we prioritized diversity in our team so that we could learn and understand others' perspectives and improve as a whole. Attempting to break the stereotype of robotics clubs being all-male, and to expand the viewpoints of the robot, our team included four female members—three juniors and one sophomore—in addition to the four male students on our team. **We take pride in becoming the only Gael Force VEX Robotics team to have an equal number of male and female team members.** We aimed to set a precedent for future robotics team to come, not only at our school, but also all across the nation, and this Girl Powered challenge provided the perfect platform for our grand goal. The true inclusiveness we strive to achieve is not an all-girls team, but rather an environment where females and males can work together cohesively, respectfully, and productively to achieve their ultimate goal of designing and building a winning robot.



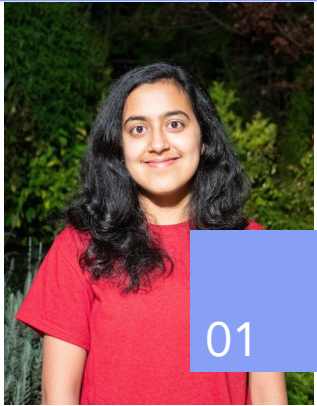
What makes Z-Team GIRL POWERED?

Upon our season starting, we came together as a team with the common goal of designing and building our robot. Initially, however, we encountered difficulty in communicating our ideas to each other. Most team members were not familiar with each other and the male-female dynamic made navigating this situation increasingly challenging. However, due to the balanced nature of our team, we ultimately established a strong team connection due to our shared goals and respect for each other. The feminine lens was crucial in developing a healthy team dynamic in addition to enhancing the quality of the robot. We included small and large group discussions about quality of the robot to further improve our team dynamic. Our primary intention was to ensure that each member's thoughts, especially those of the female members, on the robot are heard so that our robot can be optimized. Through our successes and failures in our robot designs, we feel that we've not only built the best robot possible, but have also gained invaluable experience regarding working respectfully and productively with a diverse group of people.



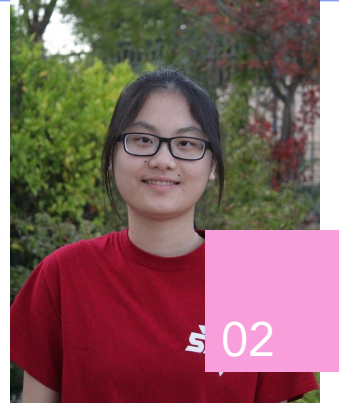
Girl  Powered®

How Girls Power our Team



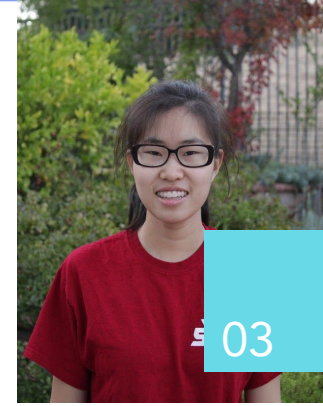
Samiksha Yelthimar
LEAD PROGRAMMER

Having joined robotics this year, Samiksha is the newest addition to our team. She is primarily a programmer and picked up quickly on how to create autonomous routes and PID controllers. When she's not programming, she's also learning to build.



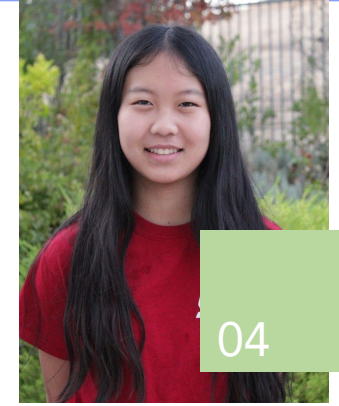
Antonia Leung
BUILDER

Antonia is a junior and this is her second year. Her thirst for knowledge helped her to learn with the mentorship of many seniors in VEX Robotics. This year, she applied her knowledge to reality and contributed greatly in the building of the robot.



Angela Chao
LEAD BUILDER

Our most experienced member, Angela Chao, is a veteran robotics member who participated in numerous competitions, events, and different teams as well. Angela also worked as a mentor to our team.

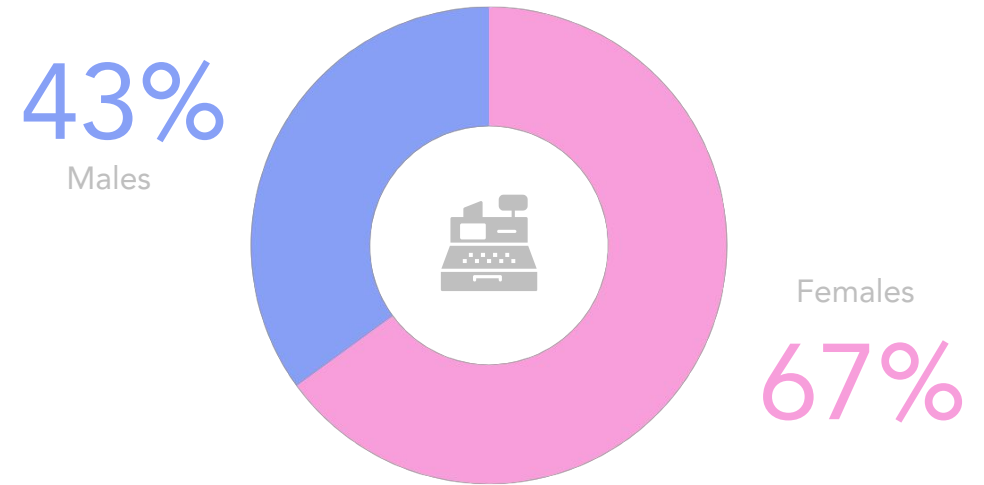


Karen Zhao
CAD AND DESIGN

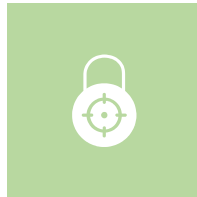
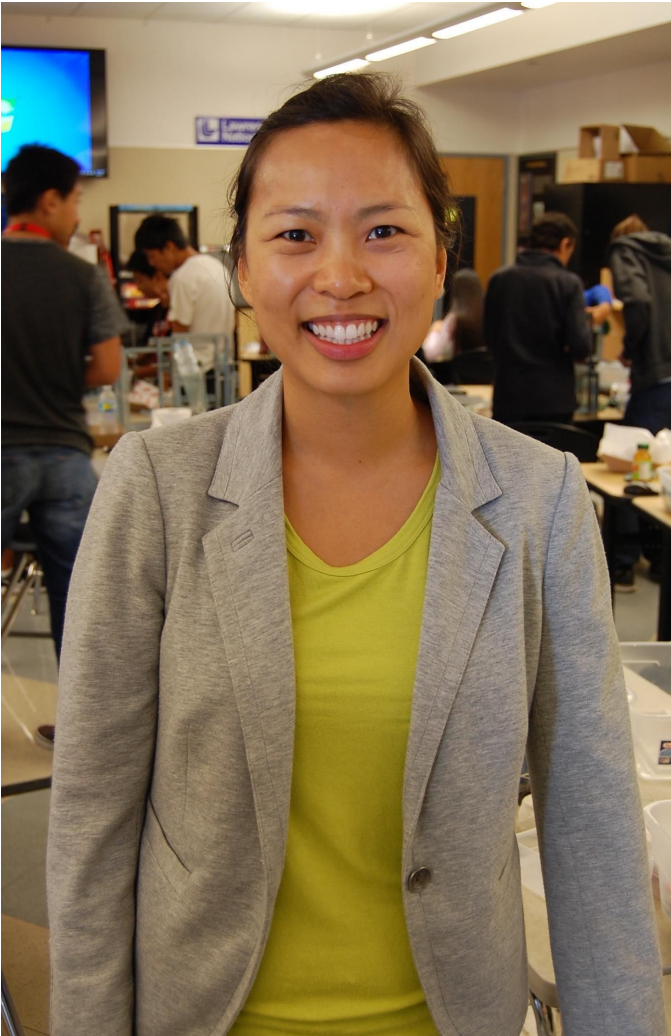
Karen Zhao is also one of our most skilled members and is a prospective captain for the next robotics season. Last year she was the youngest member on a robotics team, but her capabilities to learn and design a robot allowed her to deftly (girl)power through.

Team Chemistry

Our team has excelled this season largely due to the positive environment that we have cultivated. The success of 5327Z is made possible by contributions from all members. Males and females naturally view and solve the problems differently. Through the different experiences and perspectives each of us possess, we have been able to solve problems more efficiently with more creativity. With our inspirational discussions, we accept new ideas with open minds and welcome new members with kindness. We conquer challenges, grow and improve together.



Our Inspiration



Though numerous women have inspired us to excel in STEM, none have influenced us quite like Ms. Eugene Chou. She is not only a PLTW accredited instructor for Principles of Engineering and Digital Electronics, but she is also the head of the engineering academy at our school. Because of her guidance and constant encouragement, we have been able to succeed in the rigorous STEM landscape. Ms. Chou helped us navigate through a male-dominated field by actively seeking out females to join the academy, achieving a 1:1 male to female ratio the past three years. With more females applying each year, our school's engineering academy exemplifies the result of years of hard work. Like Ms. Chou, we hope to inspire more girls to join robotics and the STEM workforce later on.

Impacting the Next Generation

01

Spreading Girl Power

An inclusive environment with equal opportunities is the best way to increase diversity and to promote girl power, so we've worked hard to speak our beliefs into existence. We will pave the road in VEX robotics by introducing more aspiring female engineers to our team and club.

02

Gael Force Academy

We strive to influence the ones around us by actively providing opportunities to new generations of VEX participants from the Gael Force Academy. Our intern Kellie, who showed strong interest and capability as a member of the Gael Force Academy, has proved to be an important asset to our team as she has brought her unique skill set and viewpoint to our team.

03

Community Outreach

We intend to increase our community outreach by empowering more female students interested in STEM to join VEX robotics clubs. Members also regularly volunteer at a local non profit museum known as the Valley Children Museum (VCM) to inspire the next wave of engineers.

