

The Future is Female

By Lucy Woo
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Meet the Team



Ashley Rogalla-
Writer and Driver



Mia Scalia-
Driver



Lucy Woo-
Writer and Driver



Riley Cousans-
Builder and Driver



Victoria Figueroa-
Builder, Coder, Driver



Isabella Hogan-
Builder, Coder, Driver





Aurora Davis-
Driver



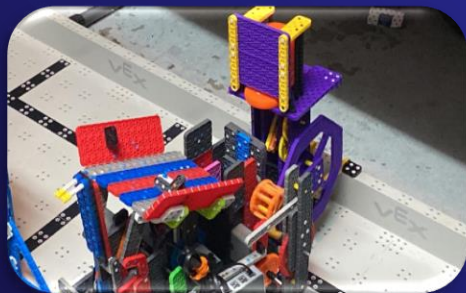
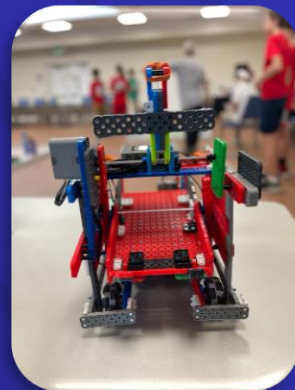
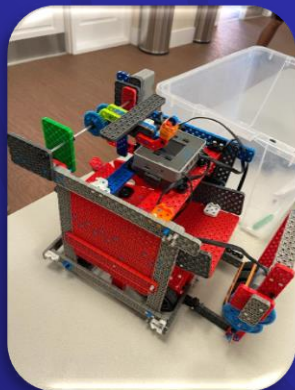
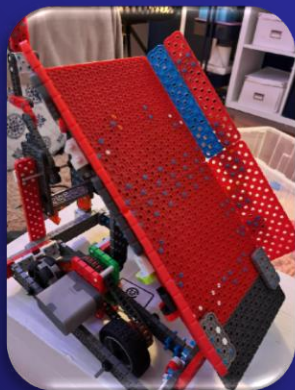
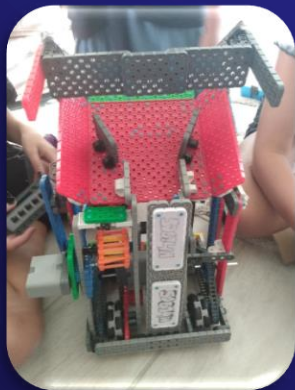


Girl Powered.



When I hear the phrase “Girl Powered,” I think of feminism. I think of women coming together to take a stand about something they’re passionate about. I think of supporting and uplifting one another, building each other up when all you want to do is break down. I think of relentless positivity, of encouraging and cheering people on when they need a boost of confidence. This is reflected in my team’s approach to robotics because this is precisely the energy that we bring into everything we do. For example, driving is not my strong suit and can be extremely frustrating at times, making it easy for me to doubt myself and surrender altogether. However, the never-ending support and reassurance from my teammates is what fuels me to keep going, and they’ve helped me build up the confidence to step up to the remote. This applies to competitions as well: If you look on the sidelines of any competition that 50674A attends, you’ll see a united front of enthusiastic young women hyping up their drivers just before a match. Win or lose, we have each other’s backs no matter the outcome, and that’s what girl power is truly about.

LAVIRMA: The Evolution



An Inclusive Environment

My team takes initiative to create a more inclusive environment that attracts a diverse group of students by making sure that we respect one another, empower each of our members to contribute equally, and forming connections with other robotics students. We show respect to our fellow teammates by allowing everyone a chance to give their input and taking every possible suggestion into consideration when deciding which solution is the most efficient. We often have different views on which mechanism would be most effective for a certain purpose, so it's important that we are able to have calm, rational discussions where everyone's voices are heard. We promote equal contribution by splitting up the work equally. For instance, we are constantly working to make the best possible version of our robot, which means that we have rebuilt it numerous times. When it comes time to construct a new version, we all join the building sector and work on a different part, which are then all put together at the end to make our final product. Lastly, we form connections with other robotics students by making an effort to befriend various teams at competitions. Our alliances may just be for matches, but they allow us to collaborate with students from other schools and develop relationships with all different types of people. Inclusivity is important to us as a team, which is why respect, equal contribution, and communication are things that we prioritize.

Interchanging Roles

In our group, we make sure that everyone has the opportunity to try various roles on the team by having each member choose what sector they'd like to be a part of and allowing for the overlap or changing of jobs. To start with, we have four main sectors: writing, coding, building, and driving. Writing encompasses of the notebook and REC Foundation challenges, coding refers to the programming of the autonomous code, building includes robot construction and modification, and driving is participating in remote-controlled matches. Although we each have our own designated roles based on preference, we are not at all restricted from switching sectors and trying something new. For example, Mia (a driver) regularly builds, Riley (a builder and driver) participates in coding, Lucy and Ashley (writers and drivers) often assist with building, and Victoria and Bella equally alternate between coding, building, and driving. From this experience, we get a chance to familiarize ourselves with several different aspects of robotics that we may not be as skilled in, opening our minds to the possibilities of roles that we may have not previously considered as fit for us. This forces us to step out of our comfort zones and try something different, consequently become more well-rounded students in the process.

Autonomous Code



```
when started
  set outake velocity to 500 %
  set tipper max torque to 500 %
  set drive velocity to 500 %
  set basket max torque to 500 %
  start code
  drive forward for 5 inches
  turn left for 30 degrees
  drive forward for 20 inches
  turn right for 70 degrees
  drive forward for 10 inches
  turn right for 45 degrees
  drive forward for 3 inches
```



Diversity of Perspective

I believe that diversity of perspective changes our robot design because we all see things through different lenses. Each of us has a different amount of experience; Riley and Ashley have been doing robotics for four years, Mia and Bella have been doing it for three years, and Lucy, Victoria and Aurora joined last year. This affects our robot design because our varying perceptions allow us to identify different solutions to the same problems; A more experienced member may find a solution that's worked in previous years, while a newer member may find a simple solution. When it comes to team chemistry, our vastly differing personalities allow us to thrive as a group because they strengthen our team bond. The idea that opposites attract seems to apply to groups too, because who we are as individuals has allowed us to create a friendship that extends beyond robotics. This ability to trust each other benefits our collaboration skills and raises team morale, as well as making robotics all the more fun. Which brings me to my last point: Our diversity of perspective affects our ability to succeed because our array of unique perceptions coming from seven different people give us an advantage when it comes to problem-solving, and our strong team dynamic will only propel us forward in this competition.

Stronger Together



STEM Role Model



Shown above, Mrs. Roberts is pictured with past and current students after receiving recognition by the city of Coral Springs for her accomplishments and efforts with the CSMS robotics program.

My STEM role model has been the same for the past two and a half years: My robotics teacher, Mrs. Roberts. Mrs. Roberts is well respected by every single one of her students because of her extensive knowledge of robotics and experience in STEM-related education. Today, she teaches GEARS science and business technology, along with single-handedly managing the CSMS robotics program. Mrs. Roberts inspires us to have a more inclusive team and program by teaching us to think critically, communicate respectfully, work diligently, and persevere. I consider her to be a prime example of a STEM role model because she practices what she preaches. She treats each and every student with respect, encourages us to experiment and ask questions, and is always available if we require assistance. She puts her all into this robotics program, and her dedication is the reason the CSMS teams have gotten to where we all are today.



Conclusion

All in all, the majority of STEM fields are primarily male dominated. Women have been in the minority for far too long, and it's about time we changed that. Girl powered teams like ours seek to balance out the playing field and show our peers that robotics is for everyone. Computer science is the future, and we hope that by raising the number of women in STEM, we'll be setting up a future finally reaching gender equality.

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