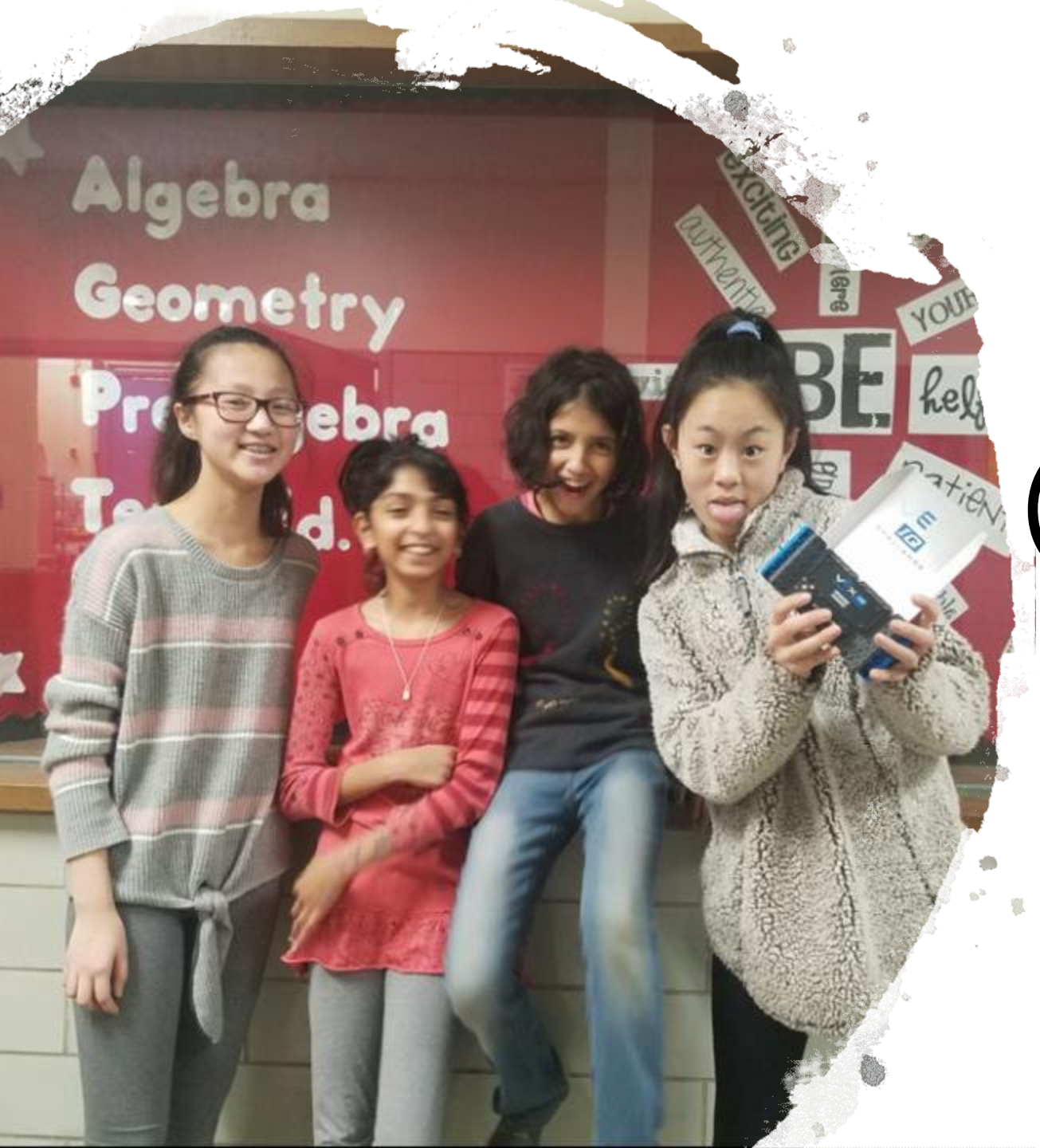


Girl Powered

952 G

What it Means to Us

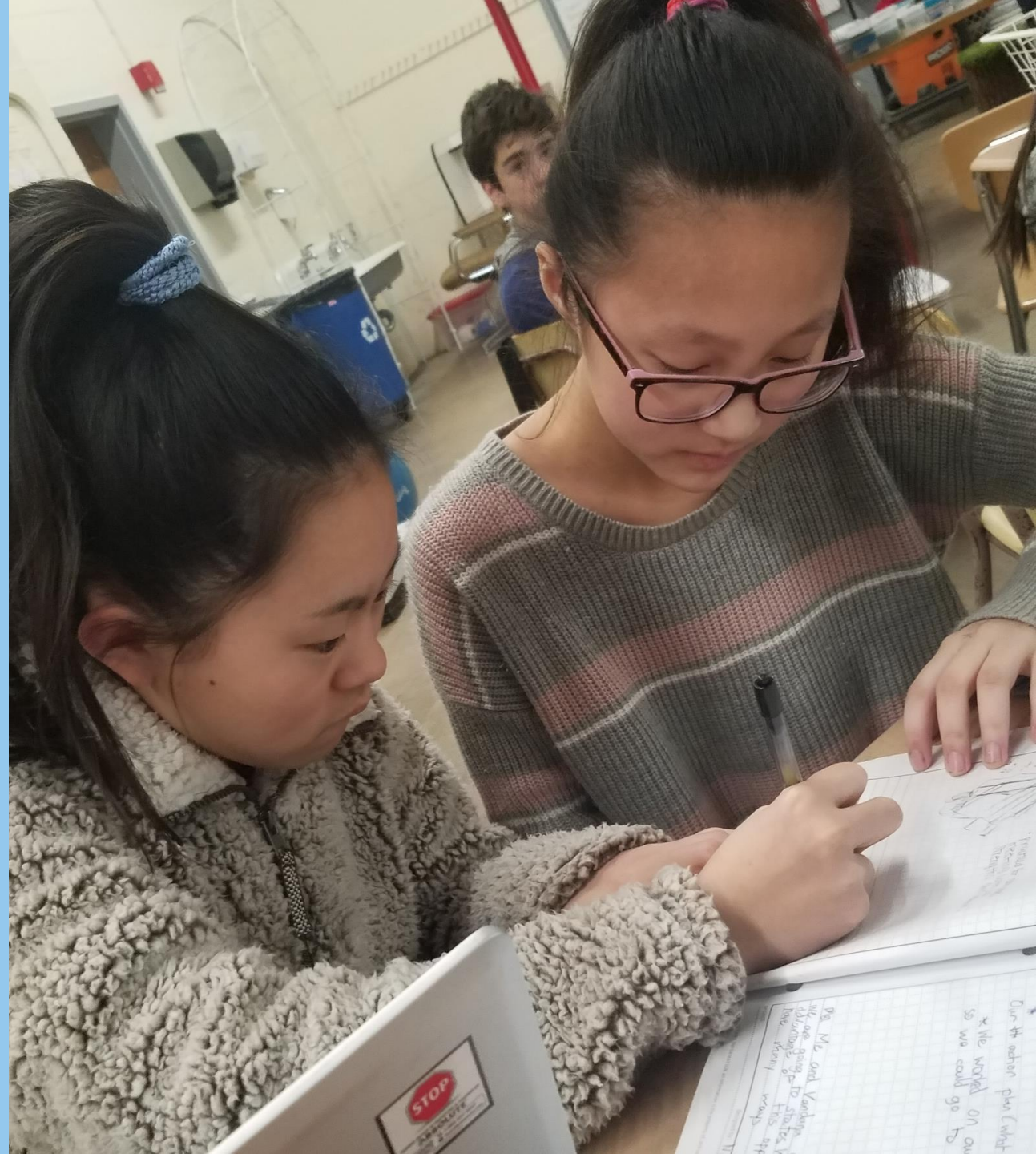
We are **Team 952G**, a Vex IQ team from Ridgely Middle School. We also happen to be the only all girls team from our school. Girl Powered to us means **defying social standards** and **breaking free from stereotypes**. Girl Powered means that we don't let our gender define us. Being a girl shouldn't mean we are lesser people. It means that the 20% less pay women get shouldn't exist. As a Girl Powered team, **we work together, we win together, we lose together.** As Team 952G, we are proudly powered by girls.

True Story!

- Girls in STEM is a subject near and dear to our heart, starting with our (Lily and Mingni's) Robotics experience. As sixth graders, the amount girls in Robotics was sparse, less than a third of the amount of boys. After a year, we became seventh graders, and half those girls quit. Lily and I both tried to convince our friends, even just classmates to join Robotics. When we saw who the new sixth grader team members were, we couldn't help but to feel a little happy. The amount of girls who had tried out and got in, was far more than last year. A couple practices later, we found out that we were going to be in an all-girls team! In 2017, estimated 40% of female engineering students end up quitting the field. And, we saw that first hand. **As a girl powered team, we try to empower and encourage each other to succeed in STEM activities.**

Inclusivity

- With our own experience of friends quitting, as a Girl-Powered team, we **try our best to encourage others to join Robotics.** But it's not just outsiders, we **empower each other** too. The best part of Robotics is that **we are always a team**. It doesn't matter who you are or where you come from, because at the end of the day, when the robot just won't go forward, or when the line of code refuses work, we know that at the very least, we have each other. And as High School Musical says, "We're all in this together". At Robotics, **it is never me against you, it is always us against the problem.**



Working Together!

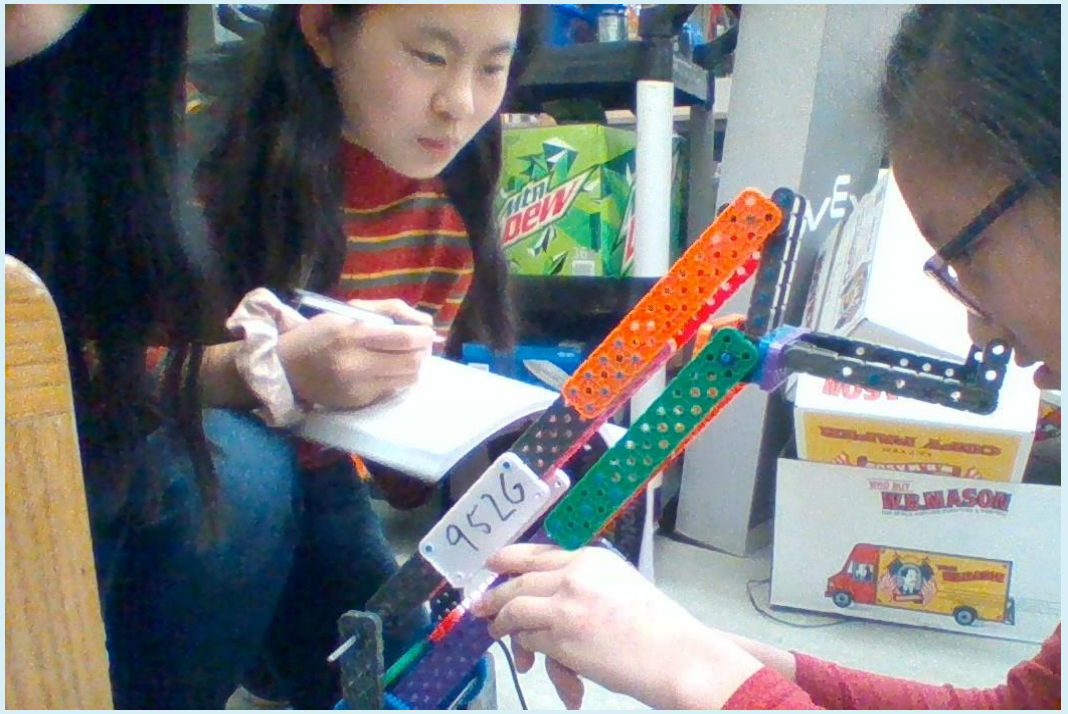
We are so lucky to have a **very diverse Robotics Club**. As a Girl-Powered team, we don't have to just depend on our own all girls team, we also **strategize and discuss with other teams**. When we have a problem, we can **put all our heads together to solve it**. We all have **different strengths** and different **ideas to contribute** and that's how we succeed. For example, Lily is good at building and has the most experience. Mingni is more inclined towards writing in the Engineering Notebook and works with Lily to build. Nitara is a good programmer and has great ideas. Vandana also does programming and has great communication skills.

Working as a Team

- Having multiple perspectives is very helpful. None of us thought to include a 4-Bar until Lily mentioned it. That design change has been very helpful in playing the game as it allows for us to reach the golden hubs (yellow hubs) much easier. As for our team chemistry, it's taught us to be more patient and how to compromise. When multiple ideas are presented, we have a better chance at succeeding. It also helps us individually because if there's a problem, we know that we can work together to solve it. By being a Girl-Powered team, we listen and respect each other's ideas. And that, helps us succeed.

Team Roles

Thanks to robotics, **we have all tried something new**. Lily has the most experience, so she is our main driver and when it comes to design, she also has a lot of great ideas. Vandana and Nitara normally assist in building. We have discovered that they have great communication skills, and at competitions, are good at talking to the judges. As a matter fact, we were able to win the Design Award! Mingni helps Lily build and design, but she writes more in the engineering notebook/work on the online challenges. **We would have never known what we were good at without trying everything first**. At competitions, Lily and Vandana are our main drivers. But, on the Skills competition, we try to rotate drivers, so we all get a chance to experience the game. **Most importantly, we will always help each other out.** Because **we each have different strengths and weaknesses, we can always learn from each other**.



For example, Lily has the most experience when it comes to Robotics, so she is always willing to assist us when we are unsure about where a part goes. **Trying out new things let's us broaden our horizons and find skills we didn't know we had.**

Our Role Models-Vandana

"Ada Lovelace is someone who has inspired very much, she motivates me to overcome obstacles,"-Vandana M.

Vandana:

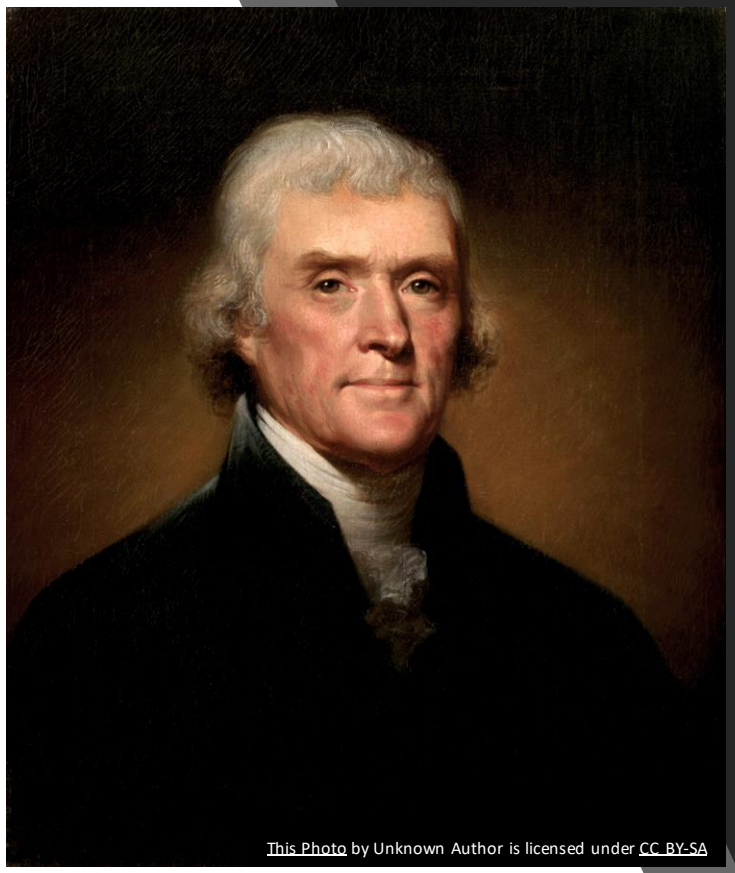
My role model is Ada Lovelace. She defied the image of women in her time. Ada Lovelace was an English mathematician. She and Charles Babbage introduced many computer concepts. She's considered to be the first computer programmer. Without her, we probably would not be able to have the level technology now. It motivates to know that the computers we type on and the phones we use would not be here without girl power.

Our Role Models-Mingni

"Katherine Johnson is my role model because she inspires me to reach new heights every day and to never let my gender define me,"-Mingni D.

Mingni: My role model is Katherine Johnson. After watching the movie *Hidden Figures,* I was really inspired by her. At 14 years old (only 2 years older than me!!), she graduated high school. Katherine Johnson also calculated the trajectories for the Project Mercury return. Without her, it's very likely that astronauts Alan Shepard and John Glenn would have not made it back to Earth safely. Katherine Johnson motivates me to always go after my dream and not to let anybody stop me.

Our Role Models-Lily



- “Thomas Jefferson is my role model. He is my role model because even as a fancy-schmancy politician, he was really down to earth and made many scientific discoveries.”-Lily X.
- Lily: Thomas Jefferson invented many modern agricultural aspects of science and technology. For example, he re-created the plow according to scientific principles that from Sir Isaac Newton, the inventor of mathematical physics. It shows that you be conformed to only one thing. You don’t just have to be a politician or a scientist.

Our Role Models- Nitara

- "Grace Hopper is my role model. She's so inspiring and made a pioneering effort in computer science!"- Nitara S.
- Nitara: Grace Hopper wasn't only an inspiring navy officer in World War II. She was also assigned to program the Mark I computer. Even after to war, she continued to work in computing and led the team that created the first computer language complier. This eventually led to the widely used COBOL language. It really inspires me to know that one of the one popular programming languages would have never happened without a female! That's that some girl power right there!"

CREDITS

- Team 952G:

-Lily Xu

-Mingni Dong

-Vandana Madhusudhan

-Nitara Sen

TEAM 952G'S GIRL POWER