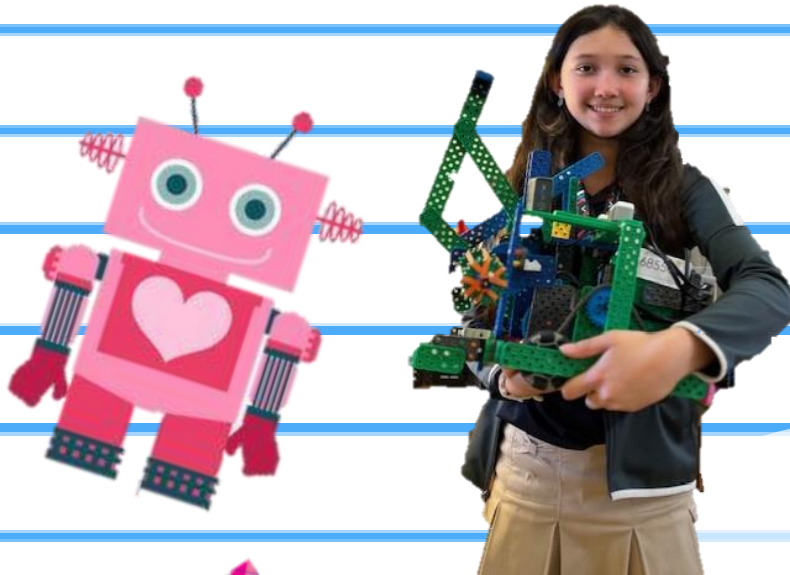


Girl Powered with Perseverance

By: Hannah McGrath



Westminster
Christian School
Miami, Florida

6855C Warrior Engineers

Introduction



My name is Hannah McGrath and I am on team 6855C. Our team mascot is the turtles! My team is made up of five boys and one girl. Even though I am the only girl on my team that does not mean I am any less than the boys. I have Girl Power with Perseverance!





I am 10 years old and in 5th grade. My heritage is American and Nicaraguan. I play tennis and the violin. My favorite subject is math, and my favorite parts of robotics are Driving and Programming.



Our Team

We are team 6855C!



Gabe Rodriguez



Hannah McGrath



Mikey Robinson



Sam Hernandez-Mas

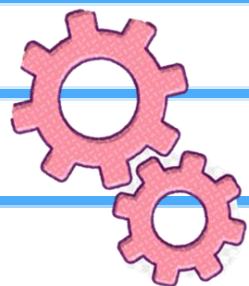


Ryan Dopazo



Luca Cappelletti

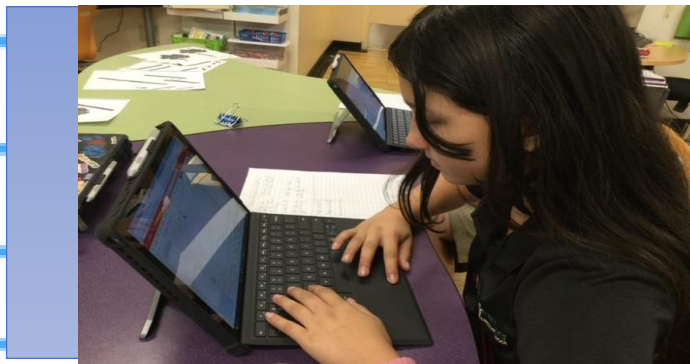
This is my team, and for most of us this is our second year in robotics. We all rotate jobs, but we are assigned responsibility for a specific area. I am the **programmer** for my team as well as one of the main **drivers**.



Innovation



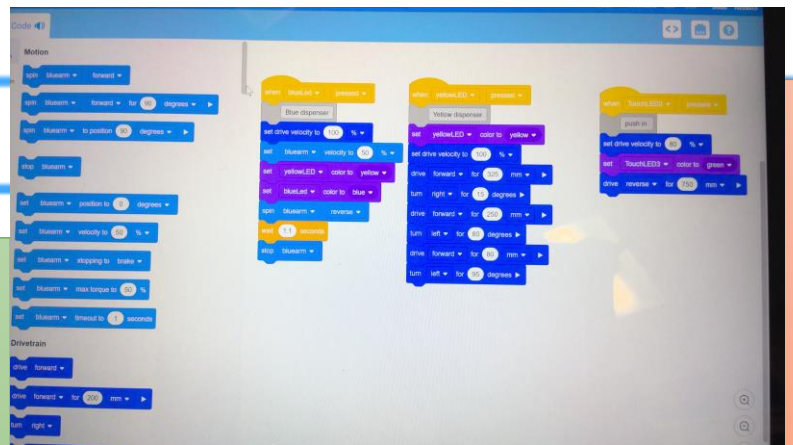
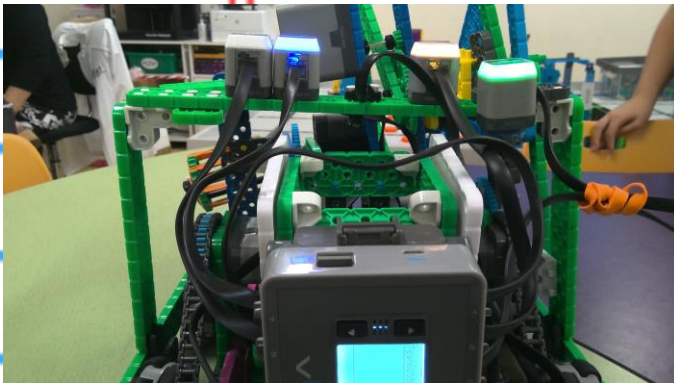
Innovation is defined as a new method, idea, or product. My approach toward the building and programming of our robot is very different from the boys on the team. I look more at the whole project whereas the boys on my team focus more on just the driving. The innovative ideas towards robotics by being the only girl changes my team a lot. I have a much different perspective and way of doing things than the boys. As a girl, I bring a new way of thinking to the team. Also, it is a change to have all boys on my team this year. Last year I was on an all-girl team. As a team, we all bring new perspectives to the team, and varied talents. I bring one year of robotics experience to the team. I bring a creative point of view, and programming talent to the team. I enjoy being the only girl on the team.





Programming

This is my proudest part of being on a VEX IQ team, my programming. I use VEX Code Blocks. My innovative idea for programming is to add multiple touch LEDs and each LED has a different program for it with a different color so I can remember which one I need to press. It helps because if one program messes up, we can easily rerun the program. This programming idea has allowed us to earn first place in skills at our last competition. We are currently ranked 2nd in South Florida, 3rd in Florida, and 65th out of 2,483 teams in the USA. I feel that my innovative programming idea helped us reach this achievement.



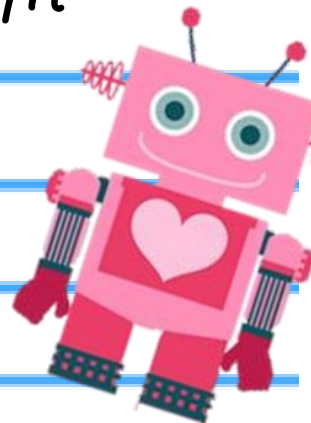
Girl Power

When I hear the phrase **Girl Power...**

When I hear the phrase **Girl Powered**, I think that **girls** can do **anything**, and we are just as good as boys. This reflects my approach to robotics by knowing that **girls** can do **anything** we **put our mind** to with **perseverance** and **dedication**. We are **capable of anything**. As I have demonstrated this season, you can be the only girl on the team, or like last season, you can be on an all-girl team, and your girl power can still shine. Girl Power also means that you help other girls succeed by sharing your strengths and skills with others so they can achieve their goals. We serve as role models to younger girls, so they are motivated to join the robotics teams. I also have a strong Christian faith and believe God has given each of us special gifts that we are to use to benefit others.

"I can do all things through Christ that gives me strength."

Philippians 4:13

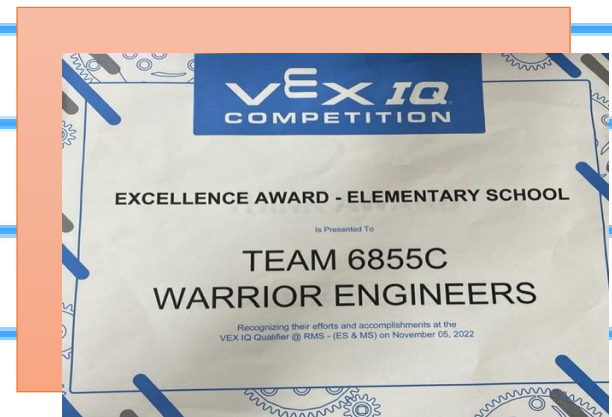


Lifelong Skills

One of the best **lifelong skills** that I have learned from **robotics** is **teamwork**.

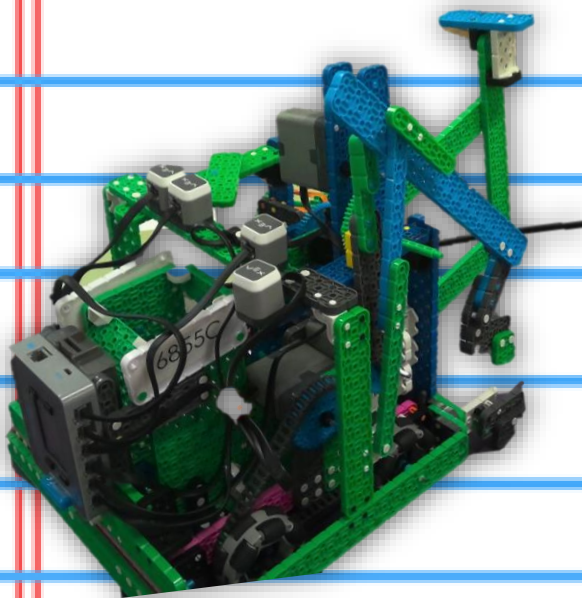
Teamwork is very important. When you have **teamwork**, it helps you talk with your **team members** and learn more about **other people's talents and skills**. When you have **teamwork**, you **work** and **collaborate** as a **team**. **Teamwork** can help your **team** in many ways. It allows everyone to do their share of the work that is needed to be a successful team. It allows everyone to shine during the judges' interviews as no one person dominates the conversation. With good **teamwork**, our robotics team has achieved many goals like winning awards. This skill is crucial when you start a job or work in groups which we will all have to do someday.

At our **first competition** we won **Excellence award**. With all our **different perspectives** we put in **teamwork, perseverance, and dedication** to win that award.



What I have learned through robotics...

One of the things I have learned through robotics is leadership. According to the Oxford Dictionary, "leadership is about taking risks and challenging the status quo." I learned to think outside the box to solve my programming challenges. Through time, I developed the ability to share my programming knowledge with other team members not just on my team but on other teams as well. If I did not take risks in my approach to programming, I would be stuck using the same methods as everyone else. A good leader also asks for input from other team members so they can get many different perspectives on how to fix a problem.



Team Diversity

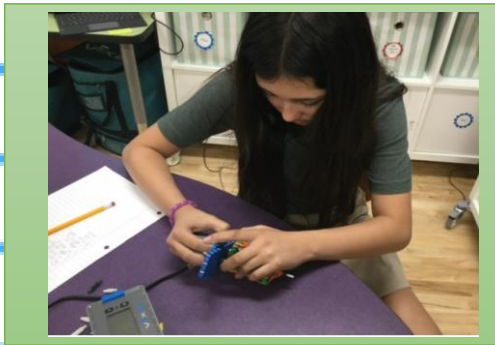
My **team** has a lot of **diversity** in the members, which helps when it comes to **robotics**, because of all the different points of view. This diversity affects how we think of **creative design solutions** on our **robot**. Everyone has a different talent like how I play violin, Gabe plays the clarinet, Ryan plays football, Mikey plays soccer. Sam plays basketball, and Luca plays trumpet. Since we are all **different**, we have a **different way of looking at things**.

GIRLS
power



Various Team Roles...

On our robotics team, we have various team roles like building, driving, programming, journaling, and online challenges.

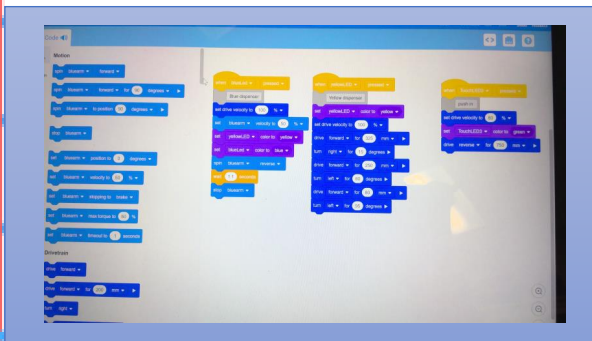


Building

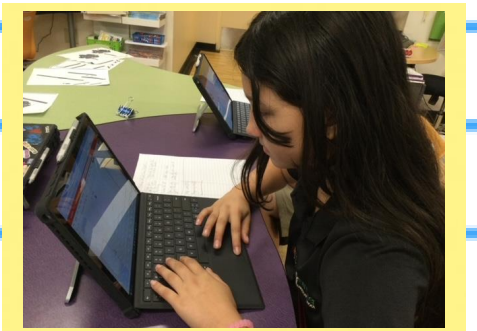


Driving

We rotate through all the roles, so we learn all the jobs that need to be completed for a team to be a successful. This is important so that we can help each other out during a team interview in case anyone forgets to say something important.



Programming



Journal

To make sure that all areas are completed, each person on the team is responsible for a section of the journal. That person needs to add summaries and pictures, update the table of contents, and make sure that each page is signed and dated.



STEM Role Model...Part 1



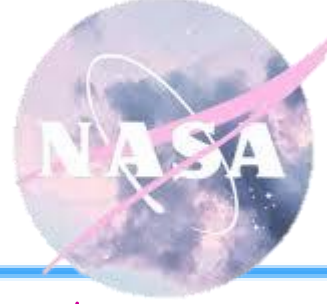
It is not very common to have two women coaches for a robotics team. Mrs. Pastrana and Mrs. Gordon inspire me to be my best in robotics. They mentor and teach me how to become better at being a valuable robotics member of my team.



Mrs. Pastrana

Mrs. Gordon

STEM Role Model...Part 2



My STEM role model is Sally Ride. Sally Ride was the first American women to go to space. At space she worked the robotic arm. She used the arm to help put satellites into space. Sally Ride inspires me that girls can do anything we put our mind to do. Sally Ride also helped students - especially girls -study science and mathematics.



"I would like to be remembered as someone who was not afraid to do what she wanted to do, and as someone who took risks along the way in order to achieve her goal."

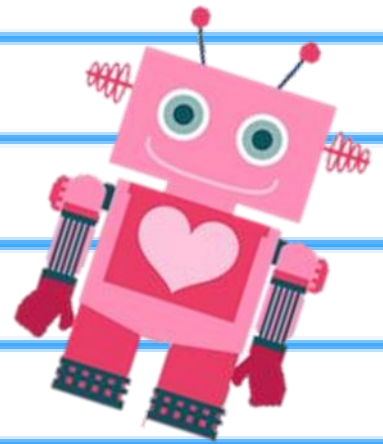
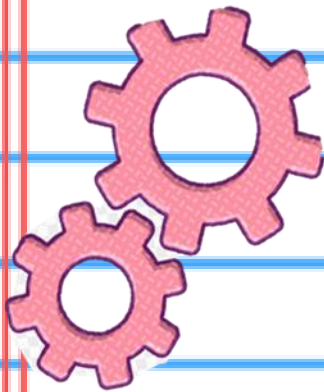
-Sally Ride-



Credits

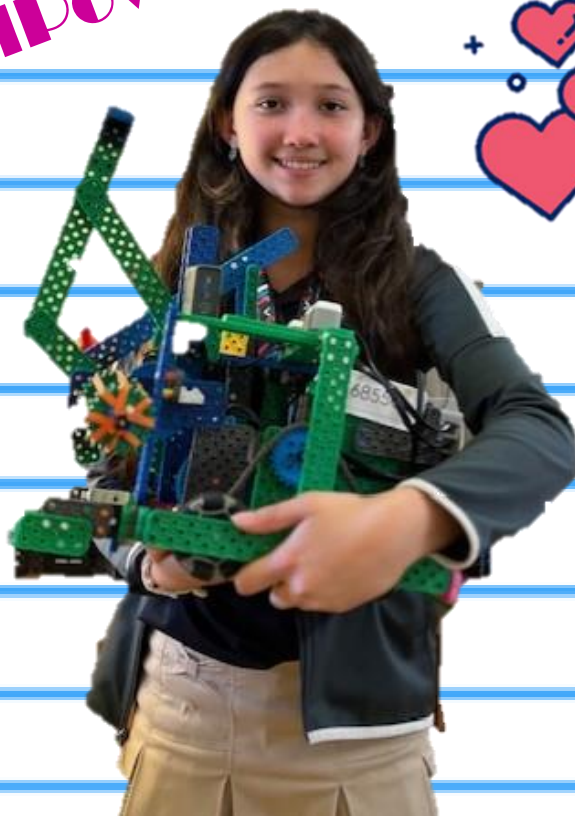


Team 6855C Warrior Engineers
Hannah McGrath



Miami, FL

#GirlPowered



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