# UNDERESTIMATED



## **GIRL POWER IN C2C**

SAMANTHA TAN

(SHE/HER)

This is my first year doing robotics and C2C has made it an amazing experience. My team members are friendly, and it's great to come here every week. I am excited for the upcoming events.

**ENYA CHEN** 

(SHE/HER)

This is my second year doing VRC but I've been doing robotics for most of my life. Being here at C2C we're exposed to high gender diversity in our community. I'm extremely grateful for my team and I can't wait to further my education through future opportunities. My primary role is programmer, but I also work on documentation, strategy, and driving.

## WHAT IS GIRL $\heartsuit$ Power to us?



Source: U.S. Census Bureau, 1970, 1980, 1990 and 2000 Censuses; 2010 and 2019 American Community Surveys, 1-Year Estimates.

Women, especially in STEM, constantly have to overcome discrimination in their fields of work and in their careers. From harmful gender stereotypes to evident gender bias, females working to quash gender inequality is our definition of "Girl Powered." The gender difference inspires us, rather than discourages. Knowing that we can make an impact in this industry which represents our community is amazing.

## XÓW DOES GIRL Pówer Affect US?

28 percent. According to <u>the American</u> <u>Association of University Women</u>, 28% is the amount of women that work in STEM jobs.

Along with many other STEM fields, the percentage of women in robotics is low. However, women in STEM have made a huge impact by creating a diverse voice in this industry and made innovations more representative of our society. In a still largely male-dominated field, we embody "Girl Power" by making sure every team member's ideas are heard and that our finalized product is representative of everyone's effort. When we interact with our VEX community, we discuss nitty-gritty details about our favorite subject - robotics - everything from better building techniques, coding practices, and more.



62880A at Farmingdale Regional Event

### **OUR TEAM**

On our team, everyone is given the opportunity to try various roles. Veteran members hold workshops to teach junior members all the tricks and tips to making an effective design.

When working on each iteration, the team works together to discuss changes and anyone who hasn't worked in a specific role before can lead that sub-division.

For example, Samantha has primarily worked on programming, but this year she also led strategy development. She learned how to ask questions that would guide the team's conversation so that we could determine the most effective tactics available to our team.



C2C Organization at WPI

#### **OUR GOALS FROM VEX**

Robotics is a super multi-disciplinary activity. We learn about STEM topics such as the engineering design process, documentation, mechanics, programming, electronics, project planning and more, but we also learn how to be better people. We learn how to communicate our ideas, how to be empathetic, and we



C2C at Farmingdale Regional Event

try our best to embody the phrase -"Leave your community better than you found it". We work with each other and with our peers and friends to improve ourselves technically and personally.

#### DIFFERENT PERSPECTIVES

Our team is comprised of 9 members - 2 females and 7 males. Everyone has different experience and skills, but most importantly we have unique personalities.

Junior members (Enya) bring a fresh perspective and help develop out-of-the-box ideas, then veteran members (Samantha) can help implement the idea. This type of interaction makes our team successful because we are able to share knowledge, helping everyone become more skilled, which lets us be more efficient.



Samantha fixing the intake system



#### DIFFERENT PERSPECTIVES

Since we are a competitive team, we sometimes have disagreements about the best route to take. Despite this, we all have a common goal and our sense of humor is shared by our team members so we can turn any situation into a laughing situation.

We are also a very determined group. No matter what issues we encounter, we work together to resolve it and we stick together through thick and thin. When someone is unable to pitch in due to other responsibilities, we fill in and help to the best of our ability.

This above all else makes our team successful.



Enya scouting at the Farmingdale Qualifier



## OUR STEM Role Model

We are most inspired by Emily Warren Roebling, who is considered one of the first woman field engineers. Her biggest project was conducting and managing the production of the Brooklyn Bridge from 1869 to 1883. She stepped into this field of work when her husband Washington Roebling became paralyzed and unable to work.

We are inspired by her because many of us commute to NYC for school - passing by or using this bridge almost every day.



Emily Warren Photograph (Photo Credits: Everett)

The bridge spanned over 1,595 feet, connecting Brooklyn and Manhattan.

This bridge was the first of its time.

- Longest suspension bridge
- First steel wire suspension bridge
- Was one of the tallest structures in the world

### **OUR STEM ROLE MODEL**

Directing the construction of the Brooklyn Bridge was an incredibly difficult job. Because of limited technology and little safety precautions during the time, twelve people - including the main designer and his son - have died from this construction. Knowing these harms, Emily still took upon herself to finish her husband's job.

Emily's story shows us that women are powerful, and cannot be stopped in when pursuing their goals. This is a mentality that we strive to follow, and this helps us inspire others and attract like minded-individuals

