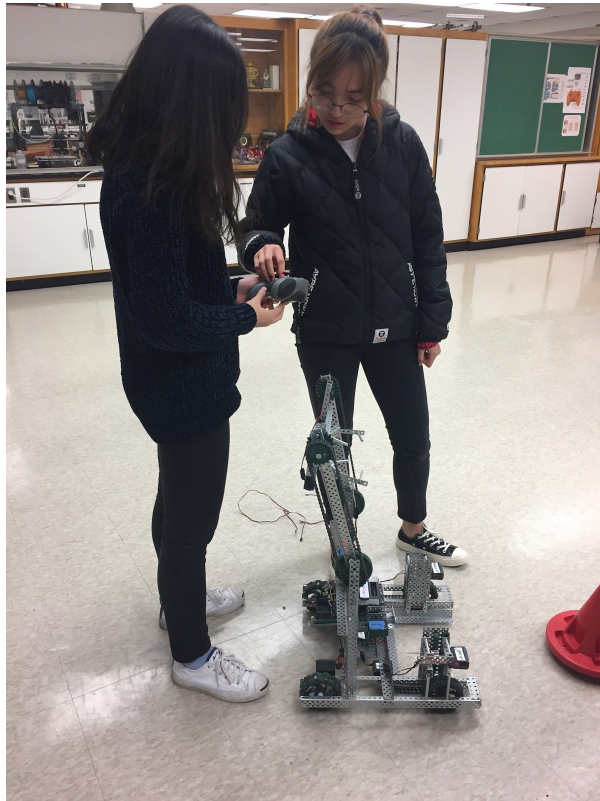


As a team consisting of 5 girl members and 1 boy member, our start was rocky. Being a new female captain with only 1 year of previous robotics experience, I was nervous on how to lead my team in a successful direction. Despite all the hardships to come along, I decided to start a team by becoming a new captain because of my previous year experience. Generally, Robotics teams do not want inexperienced new members because initial members would have to teach them about robotics and therefore, their work efficiency will go down. I had such experience last year myself being part of a team consisting of all male members. Originally, I thought I would learn a lot by being part of a successful and experienced team who has achieved many titles.



However, I was disappointed when they only let me screw on and off the parts of the robot. At competitions, I would stand around confused and follow my team around, often spending the day not learning or doing anything. There were so many jobs I wanted to learn and try: Building/Designing, Driving, and Programming. However, I was never given the chance to which led me to believe that I was not a true member of that team. However, my interest of robotics and the STEM field did not let this bitter experience get in the way of my passion for robotics. I wanted my new team to never experience what I went through before, so I decided to be open to everyone who had the passion to learn, which included new members who had no previous experience. I did not have a preference of certain sex or age either. My goal was to look for those who had enthusiasm and the passion to learn more about robots. I

even made sure we were open to everyone interested by letting them have a chance to work with us first before choosing. First, we learned together by reaching out to mentors and pestering them with questions. Since our progress was much slower than the other experienced teams, the student mentors would laugh at us or talk down on us and our robot when we asked them questions. Although we were initially hurt, we did not let this discourage us from seeking help and gaining

the knowledge we needed in order to succeed, and those hurtful remarks instead motivated us to prove everyone wrong. Unfortunately, most of the mentors, instead of providing us with concrete information on how to successfully build a robot, would give us a step by step tutorial on what to do, which did not give us much room to learn or think creatively. Instead, we decided to take a different approach to the robot building process and go online to do research on all the different parts to a robot that we previously thought were unimportant. We also began watching more VEX robotics competition videos and studied the successful robots carefully. This new approach to robotics allowed us to learn much more about the logistics of robotics and allowed us to be able to build a robot using our own ideas rather than the ideas of a mentor. We were also now able to solve many of the problems we faced by ourselves, instead of having to ask a mentor to help us like we previously had to everytime we encountered a challenge. When it came to



designing, diverse individuals with their own unique characters allowed our team to have various ideas and opinions about the robot we are building. Perspective of experienced members and new members was very different at first. Members who were new to robotics wanted to start with a simpler design while others with more experience wanted a more complicated design. We could not come to a decision at first, so we tried several designs. After making several alterations to the robot, we all realized that starting with a simple design is better because we were a new team. Working with unique individuals allowed us to realize the importance of communication and respect for each other. We started spending more time discussing and became more and more cooperative, understanding the fact that we can all have different perspective about the same subject. We supplement each other's weakness now, which allows us to work more efficiently. We believe this improves our ability to succeed as well. Now we

are proud to say that, due to our hard work, we won our first tournament champion in the Carman-Ainsworth Competition and are now qualified to go to regionals! The phrase "Girl powered" seems to explain a situation where females play a significant role in a field that is male-dominated, which perfectly describes our team, 39V, as we are mostly comprised of females. We are all actively participating in every step of building the robot and modifying it. Other teams, comprised of mostly male members, thought our team would not be able to build a properly functioning robot because most of our members are girls. This motivated us to work

harder; therefore, we achieved our goals and made our mark in competitions with our robot. All members have prioritized robotics by dedicating numerous hours and days to it, because it has been an enjoyable experience for all. Looking back now, I am so proud of our team and how, despite our shortcomings, we proved those people wrong. We still have a lot to accomplish and our goals are high. However, we are ready to show everyone how far a girl powered team can go.

Who inspires our team?

Our STEM role model is Sheryl Sandberg, Chief Operating Officer at Facebook/first woman to serve on Facebook's board, who is currently working with female governors to close tech's gender gap since the number of college-aged women majoring in computer science has declined over the past decade. She inspires our team to work hard to major in the STEM fields because STEM needs more representation from women.

About the team:

Rachael is our team captain and she is a builder. She does a lot of research on what our team could do to improve ourselves and also researches about robot parts and other teams' robot designs. She manages our schedules and makes sure our teammates are communicating well together.

Minjae is a builder and the main driver. With this being his first year in robotics, he tried building, programming and driving, but he decided to focus on building and driving.

Joey is a builder and the main programmer. She coded for the robot and its autonomous. To add on, she makes changes to the autonomous based on the robot's performance after every round of all competitions. She is willing to learn new things about programming so that the robot can have a higher autonomous score; for instance, right now, she's considering adding some sensors to the robot.

Jamie has tried building, driving and programming. She is currently a backup driver and a builder. She has interest in programming, so she learned to program but is not a main programmer.

Dina is a builder and a scout of our team. She always takes notes about our progress in the engineering notebook and does research on aspects of robotics that we don't have a clear understanding of yet. She is also willing to try driving in the future.

Aanya is a builder and has tried driving. She helps the team with her knowledge from previous years of robotics. She is willing to become a driver.

Our team does not have a designated designer. It is because we think it is important to reflect every teammates' opinion when deciding the design. Since the robot we create is not an individual's robot, we learned to respect everyone's opinions and compromise throughout the

design process. So instead of having a designated person who designs, we spend a lot of time on deciding the design and discussing how our robot should change to improve it. This way, everyone works hard and ponders together about the solutions to the problems that we encounter.



Entrants: Rachael Kong, Minjae Kim, Jamie Shin, Joey Guan, Dina Zreik, Aanya Shah

Registered Team Number: 39V

Title: "Girl Powered" team