

Girl Powered



Snapshots of our Journey

Team 81A
Sway



Without teamwork, ideas cannot be shared; without creativity, unique and innovative solutions will not exist; without persistence, there will be no success; without integrity, you cannot be true to yourself; and lastly, without women, there is no future.



We are a group of four girls from Chester Springs, Pennsylvania. In our eyes, girl power is about **empowering women to become independent, confident leaders**. We believe that women have the ability to make **positive change** and be anything they want to be.

Our Team

We are a driven group of fourteen year old freshmen in high school. We all attend the Downingtown STEM Academy. We have been friends for six years, and have become closer through our robotics experience. This is our third year participating in VEX VRC, and some of us participated in VEX IQ and FLL before.

“Alone we can do so little;
together we can do so much.”



Maryann Nazareth - The Builder



My name is Maryann Nazareth. I am a cross country runner for my school, and I enjoy taking part in various clubs. Outside of school, I like playing the piano, running, and volunteering. I am a member of a Girl Scouts troop with the rest of my teammates. When I am older, I want to be an orthopedic surgeon. Robotics will help me reach this goal because orthopedic surgeons have to use hardware to fix bones. VEX has taught me so many lifelong learning skills!

Aarushi Jain - The Builder

My name is Aarushi Jain. I play tennis outside and in school. I love to run, draw, write calligraphy, and travel. When I grow up, I would love to go into the architectural field. I have gained so much through my robotics experience, not just knowledge, but also lifelong friendships. I hope my team and I can have a successful robotics season!



Nandita Kolli - The Programmer



My name is Nandita Kolli. I love to kayak, cook, bike and run when I have free time. VEX has taught me how to work with other people, and to be hands-on.

When I am older, I want to be a doctor. VEX has helped me with this because it has shown me many skills that I will need. I hope that this year my team and I will have fun and learn more about engineering.

Rishita Penmetsa - The Programmer

I'm Rishita Penmetsa. Outside of school, I play tennis and I am a member of a Girl Scouts troop. I also love to volunteer and do charity work. Some of my hobbies include baking, badminton, and traveling. When I grow up, I want to be a software engineer. Robotics has helped me with this because I have learned to program, document my progress, and learn from my mistakes. I hope we have a great first year of high school robotics!





*Girl
power*

"Here Comes Sway, to Save the Day!"

The organization we are a part of is called VEXMEN,
and it is based on the X- Men movies series.

All of the teams in our organization are named after
X- Men characters. Our team name is Sway 81A and
is based on the superhero Sway.

Our Stories Bring us Together...

Last year, we were one of the only all-girl teams in our program. Usually, only the boys were the drivers during matches. For our team, it was **different**. At first, we were a little **worried**, but we learned to not be afraid and to **conquer** any challenges that we faced. Every week we go to our Vexmen center, to cut and get parts that we need. Whenever we would cut parts, boys would always ask us if we needed help or if we knew what we were doing. They would watch us to make sure we were doing it right. This made us **question** our abilities. Soon, we realized that the boys thought they were more hands-on, and that girls should only do documentation. Slowly, we learned how to build a robot and program by ourselves. We were able to **prove** to ourselves that we are good at robotics and if we believe, we can **achieve** anything. With that same mindset, we earned Tournament Finalists at States and qualified for the Create U.S. Open in Iowa.

"If you think you are better, prove it to others and yourself!"



Diversity: The Art of Unitedly Thinking Independently!



For our team, diversity is extremely **valuable**. We all contribute different ideas, which has helped us develop strong concepts for our robot. We **weigh** the pro's and con's and combine everyone's opinions. Diversity of perspective has allowed us to **build off of each other's strengths**. On our team, we often switch the roles we fulfill. This way, we have a **more well-rounded experience** and learn a lot. Not everyone is perfect, and **discrepancies** often occur. Instead of telling our team-members to only focus on the roles they are good at, we made sure to **help each other improve**. The goal of robotics is to improve by working towards a goal, and to also **develop** new strengths and learn from each other.



Our STEM Role Model

Our STEM role model is Amelia Earhart. She did the impossible by being the first woman to fly solo across the Atlantic Ocean. She **proved** people who doubted her wrong, and she didn't care what others thought about her. Two of her quotes that really stood out to us were *"Women, like men, should try the impossible. And when they fail, their failure should be a challenge to others,"* and *"The most effective way to do it, is to do it."* Through these quotes, we realized how Amelia Earhart **encouraged** women to not be afraid of failure. She wanted women to **try** new things and to **believe** in themselves. We strongly agreed, and were **inspired** by her bravery and courage. We have learned that even if we are facing failure, we should always **learn** from it, and use it to help us succeed. We use Amelia Earhart's experiences to create a more **inclusive** environment by promoting girl power.



The smallest act of kindness is worth more than the grandest intention.

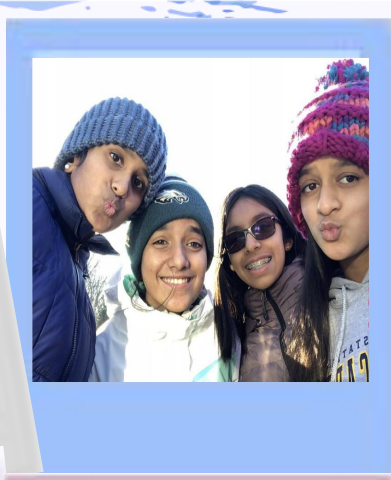
By volunteering, we have been able to **inspire** young girls in our community. We volunteered at Girls Exploring Tomorrow's Technology (GETT), which is a program allowing girls to **explore** different careers in the STEM fields. We volunteered by **promoting** VEX Robotics. We had our own table, and showed students how to maneuver our robot, and informed them about what we do as a team. A lot of girls were really **interested** after hearing everything we said, and we were so happy. We were able to motivate them and teach them about engineering! We had a small VEX IQ project for them to do as well, and overall it was such a great experience. We were able to spread **awareness** of VEX robotics and **encourage** girls. In the future, we want to have a workshop for girls who are interested in pursuing a STEM related career. We would be able to **share** our knowledge about robotics and allow girls to try new things! We also volunteered at an FLL qualifiers event to help little kids learn about robotics. We saw many kids spark an interest in building and programming!





Never Underestimate the Importance of Having Fun...

Robotics can be really stressful at times, but we still find out ways to make it **exciting**. One thing that has helped us is what we call, “robotics sleepovers.” All four of us are close friends, so if we need to get a lot of **work** done, we work on robotics and then have fun afterward. We usually work on robotics almost the whole day starting in the afternoon, and then work until ten. We set goals for what we want to finish by that day. By having robotics sleepovers, we have more **motivation** to get work done because we look forward to having a great time. This is just one of our ways of incorporating fun during **stressful** times.



Robotics is like hiking up a mountain. We started at the bottom with zero experience, zero **independence**, but the drive to be the best we could be. Slowly, with hard work and **determination**, we were able to continue climbing that mountain, winning awards and gaining **self-reliance** and experience. We have still not reached the **top of the mountain** and we may never reach it, but we have been able to gain confidence in ourselves and believe that we can **achieve the impossible**. Our main goal has been accomplished; we have been able to support girl power in numerous ways, and have hopefully **inspired** other young women to go into the STEM fields.



CREDITS

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