

# Girl Powered Questions

**1. When you hear the phrase, Girl Powered, what comes to mind? How is it reflected in your team's approach to robotics?**

What I think when I hear Girl Powered, is about girls doing remarkable things in robotics and around the world. That helped my team by knowing that we could do remarkable things, too.

**2. Share how your team has taken initiative to create a more inclusive environment that attracts a diverse group of students.**

My team has visited other students and encouraged them to do robotics. I helped them build their robots in our classroom, and made sure they understood what they were doing.

**3. Share how each team member has tried various roles on the team (everything from designing, to building, programming, strategy, awards, etc.). Explain what you learned through this experience.**

On my team there are two people. We both design and build the robot. We also both program. We brainstorm our strategies and decide whose idea is better. We tried a lot of different plans. We worked out a plan that I go first and get the rings off the peg and the bonus tray. Then, he puts the rings on the poles and pushes some one pointers.

I learned that anything is possible with good teamwork.

**4. How do you believe diversity of perspective changes your robot design, your team chemistry, and even your ability to succeed?**

I believe that the diversity of the team is important because we want to make sure everybody's ideas are listened to, so that we can make our robot the best we can.

**5. Who is your STEM role model and why? Does this person inspire you to have a more inclusive team / program? How?**

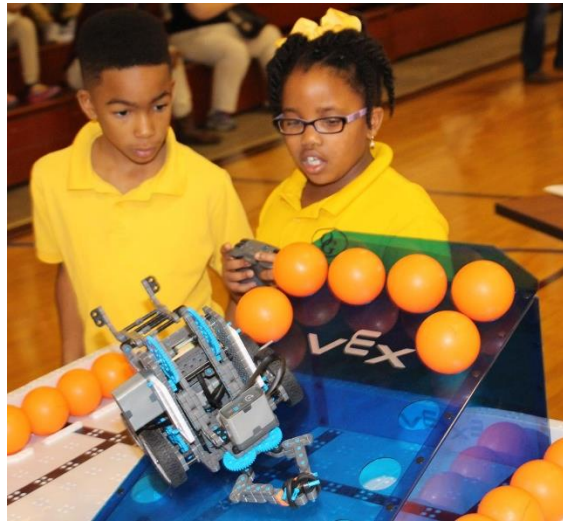
My role model is my dad because he is always there to help guide us when we put our STEM projects together. He helps us practice our presentations. He also helps us make sure we build a good robot and practice driving it.

We have both been partners on other teams that had both boys and girls. We have also been on teams that had partners from different races.

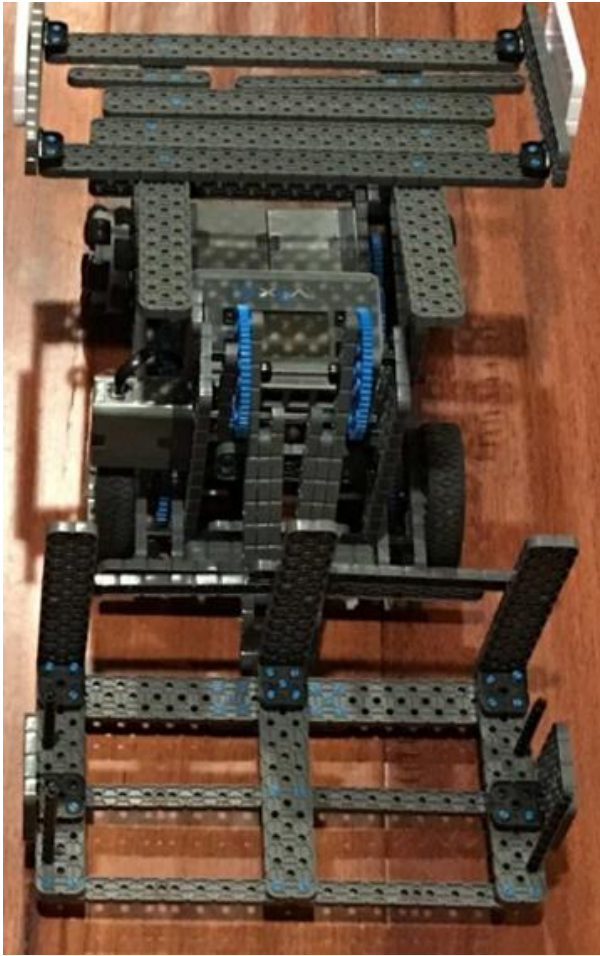
# My Robotics Story

Hello, my name is Katie Roark. I am on team 121A. I am a 4<sup>th</sup> grader at Oak Grove Upper Elementary School in Hattiesburg, MS. I started robotics in the second grade as part of the EXCEL gifted class.





We built clawbots as a team by following the instructions. Then we learned how to drive the robots. We used the robots to compete in our very first robotics challenge. It was really exciting, and we got to see a lot of really cool robots. We competed with teams from other schools. We were the only 2<sup>nd</sup> graders.



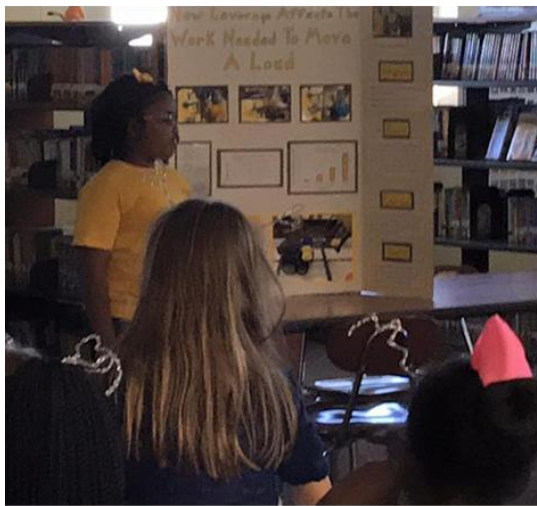
After the tournament, we came up with ideas on how to make the robot better, so it could get more balls over the rail in the Bankshot game. We came up with a scoop design which could pick up three or four balls and put them over the goal and it was good at parking. We tested the robot, and it was a lot faster than the clawbot. We also learned how to program the robot using Modkit. We made a program for the robot to go on the ramp. We were interviewed by the newspaper reporter and he said he didn't know second graders could do robotics!



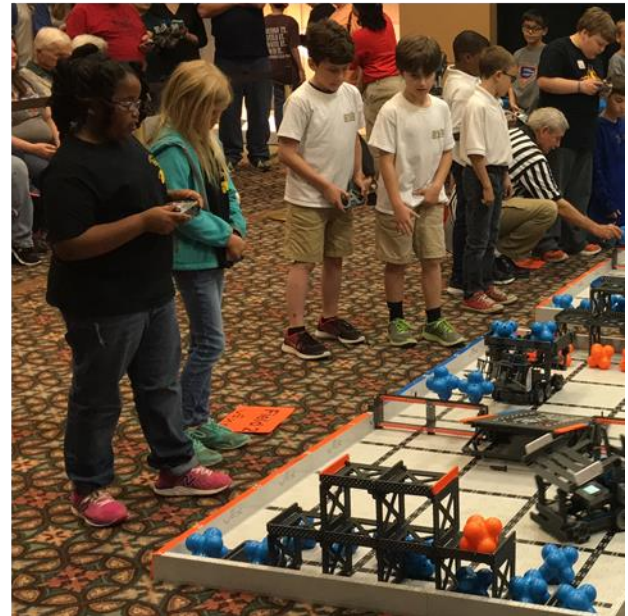
In my 2nd grade year, our team made it to the State Tournament. It was very exciting! We did STEM project for the tournament. We made a lever that had 4 fulcrum positions, so we could test how it affected the work needed to move a load. Our team won the Mississippi robotics championship STEM award!



In the 3rd grade, we built a robot for the Crossover competition. It could pick up hexballs from the wall and put them in the goal. We also did a STEM project on medical drones and we interviewed people who made a medical drone. My partner and I won an Excellence Award at one of the competitions. That's how we got to go to the State Tournament again.



When I was in the third grade, I got to talk to lots of people about robotics. I spoke to girls at our school during our own Girl Powered program. My teacher, Mrs. Amaya, and I made a presentation to the school board. I spoke to the Hattiesburg engineering society with teams from our school. I also did a radio interview about robotics, too!

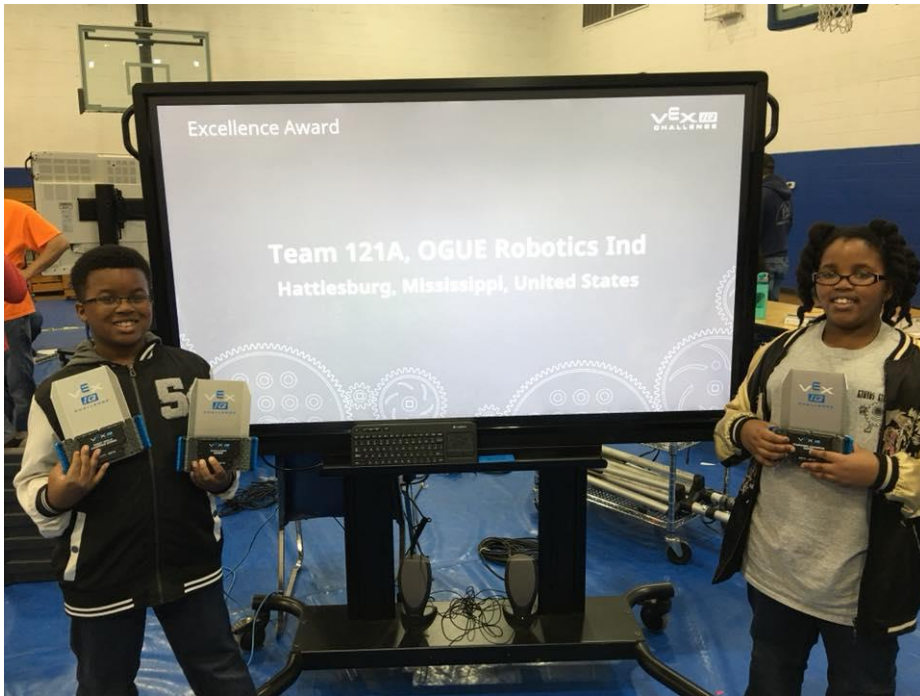


We had fun at the 2017 Mississippi Robotics Championship Tournament. We competed with teams from across the state and I made some new friends. We won the STEM award for the second time! That meant that we got to go the World Tournament in Louisville, KY.





Going to the World Tournament was so fun! We went to a Girl-Powered Social and got to march in the parade. We met a lot of people from all over the country and the world! My team had written a letter for my teacher to be the World Robotics Teacher of the Year and she won! It was a surprise when I came out on the stage to talk about her!



This year, we are doing the Ringmaster Competition. We have won 2 Excellence Awards and qualified for the State Tournament. It has been hard and fun to try to improve the robot to pick up as many rings as we can to place on the poles. We are getting better and better, though. Another thing that has been fun is helping some of my friends and the younger students learn about robotics. I hope we are able to do well at the State Tournament, and I would love to go back to the World Tournament!

# Credits

Me: Katie Roark

Team: 121A

Title: Girl Powered Katie Roark