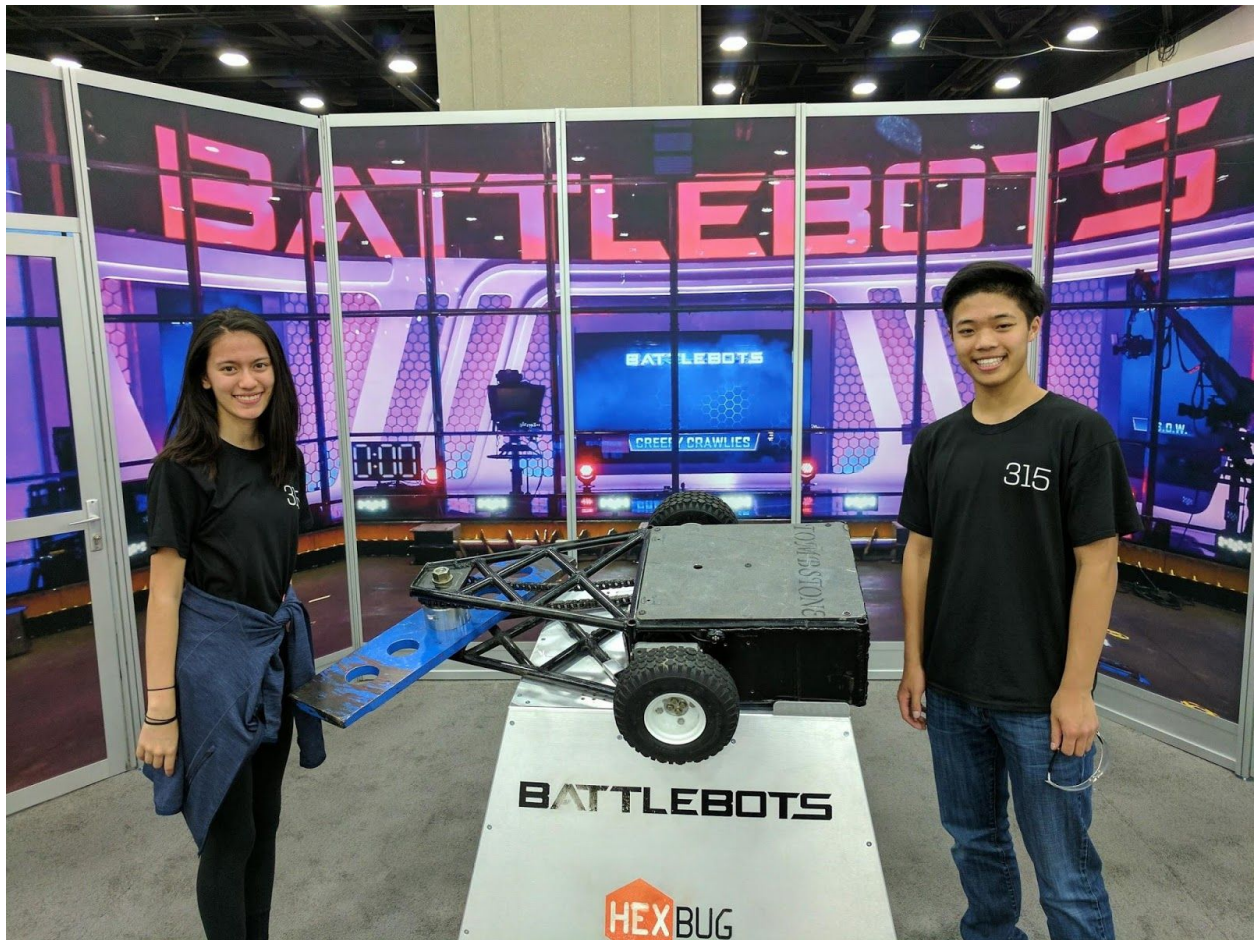


A Year in Paradigm

One year ago, the words “VEX Challenge” meant absolutely nothing to me, and robotics was an activity I was definitely *not* interested in. Half a year ago, I was stepping off a plane from Louisville planning, well, admittedly, more like chatting excitedly, for the 2018 VEX In the Zone Challenge. As I am sitting here now, I still marvel at how lucky I was to be invited to join a team and attend Worlds — *Worlds!* — as my very *first* VEX competition. In the span of a several months, I transitioned from a disinterested teenager to a proud representative of 315 Paradigm who enthusiastically promotes and inspires others to join the fascinating world of robotics.



Posing with battlebot champion tombstone.



Worlds 2017.

My story really begins when I was invited to join Paradigm. Although I was nervous about being the “new girl” to join the team, I also could not contain my excitement. I was ecstatic that there were other girls on the team, and they motivated me to continue pursuing robotics. To my surprise, the boys in the club were also very welcoming, teaching me some basics about building robots. Thus began the first of many surprises I would encounter with our club.



Some members of 315.

I quickly discovered the term “Girl Powered,” and I found that our club was very much a “Girl Powered” team. Our club, with a high-school girls team, also had a middle-school girls team, and they were just as enthusiastic to be participating in the VEX competition. As I spent more and more time working with my teammates, I realized how fortunate I was to have joined such an amazing and inclusive team. The words “Girl Powered,” along with “VEX Challenge,” began to take on new meanings for me. Whenever I heard the words “Girl Powered,” I no longer thought of how girls *could* be empowered, but by how they *were* empowered, especially in robotics. To me, “Girl Powered” meant that as a girl, I could do robotics or anything else that I wanted to do. My ideas should and would be heard. I firmly believe that being “girl powered” means that girls should be given the freedom and opportunity to see their visions become a reality. Being “Girl Powered” also means that *I* am part of that group of people who help inspire other girls to pursue new interests in STEM, like robotics, without feeling like they are lacking in some way. Now, whenever I hear that a girl should not “do robotics,” I correct the speaker, suggesting that actually, girls *can* build and compete with robots, and that they *can be good at it*.



Our middle school team.

I love that at our club, we do not treat fellow teammates any differently from one another, regardless if they are male or female. We give equal share to everyone's ideas, we listen to each other, we communicate, and we are, above all, respectful of one another. We believe in including everyone, and we stand by that belief. My teammate Chris and I approach robotics as equal partners. We both have ideas, and we give equal time to discussing them. We give each prototype consideration, and we never shoot each other down. We are supportive of each other, even when ideas do not work, because we see each failure as a new lesson. We learn more about engineering and design from each mistake, and we learn crucial lessons about how to solve problems as we encounter them.

Later in the year, I once again confirmed that we were a "girl powered" team when we hosted an All-Girls workshop at Google, a two day event where we invited girls from all over Silicon Valley to build and compete with their own robots. We gave speeches to help inspire the girls, and we made sure to give them plenty of encouragement. Just months ago, I had been in their very position, totally ignorant about VEX yet driven by my curiosity to explore more. The girls I met over the course of those two days made lasting impressions on me. Their eagerness to build robots and compete was truly a sight to see. To me, inspiring younger girls and helping them discover an interest in a STEM activity like robotics embodies the meaning of being "girl powered." Given the workshop's success, I was pleased to learn that our club plans to host other similar events.



Mona, who leads an all girls 315 team, giving a speech about her experience competing in VEX Robotics at the workshop.



A team having fun at our workshop.

One change in our club that came from this workshop was our Girl Scouts program; we mentor roughly 60 girls, split up among 10 teams. Everyone's efforts finally paid off during our tournament on December 30th, when 9 of our 10 teams entered and 3 of them made it to playoffs. Although they were not a part of the winning alliance, they came back with much higher hopes for themselves and an even greater drive to compete in robotics.



One of the Girl Scout teams we mentor.



Another all girls team at our Google Tournament.

When late summer finally came around, and as we were planning to attend our first tournaments, I was once again delighted to learn about our club's strategy process. As a small team, I had experienced virtually every role: I designed, I built, and I programmed--but I had not yet thought about strategy. To strategize, we all sat down together around a table, and our coach brought out a whiteboard. Everyone began to share their own strategies and plans, discussing, revising, and then planning some more. By the end of our session, I was so excited for the upcoming tournament. I learned that a good strategy really *does* come analyzing all aspects of the challenge, and every team member's unique perspective was what allowed us to finally formulate an ultimate plan.

Our team is definitely "girl powered," but I like to think that we are really just a supportive and welcoming club. To us, every person has a unique solution to a problem, and I think having boys and girls on a team really helps to open minds for everyone. Because we all have so many ideas, we are constantly changing and improving upon our designs. We communicate with each other and we are honest. Having so many different voices and perspectives is really how we have the ability to succeed, since every person can offer his or her own insight and strategy. Often times, when one team believes they've thought of the ultimate design or strategy, another team will interject to bring up a new idea or way to look at the design challenge. Since we're constantly changing and adapting, we are able to better design and build our robots to meet every aspect of the design challenge. We are all extremely driven and motivated, and we dedicate time to building our robots.



A design award we won.

My long-term interest in STEM has led to my gravitation towards more STEM-related activities and entertainment. This led me to find my STEM hero, the neuroscientist and actress Mayim Bialik, most commonly known for her role in *Big Bang Theory*. Her influence on me has manifested itself through showing how much opportunity STEM offers to women, and how much I would like to create a similar experience for others. Although our worlds are far apart, as she is an insanely smart and famous actress and I am a young high schooler preparing for what lies ahead, the values instilled in me from stories such as Mayim's, women who have fulfilled themselves in both stem and another passion, continue to inspire me to strive to accomplish my goals.



Posing with our alliance partner and holding awards we won at the Bellarmine tournament.

As a club, we have designed and built together, we have offered inspiration to one another, we have guided each other, and we have succeeded together. Today, I continue my journey, and as I am about to hit the one year mark of being a part of 315 Paradigm, I truly cannot even begin to describe what the club means to me. They have opened my eyes to a whole new world of robotics, and I will be forever grateful. I can only hope that in the future, when it is my turn to pass on my knowledge to the next new team, I will be able to teach them the same lessons I have learned. As girls, we have the power to accomplish our dreams and make our visions a reality. We should always value one another's ideas, and we should treat every person equally and fairly. We are Paradigm 315, and we are Girl Powered.



A team member and me.

Title: A Year in Paradigm

Author/Entrants: Jasmine Wiese, Chris Gong

Photography by Maria Gong

Team: 315 J