“Hey, sis!” My little sister piped as she skipped into my room. “What’s a robot do?”

She looked up at me with the look of pure curiosity. It reminded me of when I was her age; when I too was an elementary student interested in everything until one interest took hold. That interest came in the form of the CircuitRunners robotics team. This group of high schoolers came to my school and showed me the wonders of robotics. As I thought about my response, memories flooded my mind.

The CircuitRunners began my school’s FLL team and mentored us through the ups and downs of FIRST competition. They were always encouraging us and making sure we were having fun. Being mentored by the CircuitRunners opened up a world of possibilities for my teammates, and it certainly opened a door for me.

Just a few years later, I walked the halls of Wheeler High School as a fellow student and CircuitRunner.

When I joined the CircuitRunners, I felt like I had joined a legacy. The club was founded in 2002, and had become embedded into Wheeler High School’s culture since. From the murals that depict the club’s prestige and longevity to the on-campus workshop dedicated to a former CircuitRunner, there are signs everywhere of the impact the CircuitRunners have made on Wheeler. To the CircuitRunners, success does not always come in the form of awards or medals, rather, success is the effect the CircuitRunners made on individuals, the school, and the community.

So what made my CircuitRunner experience unique? One might think it was our outstanding robot performance - we had a run in the FTC World Championships in 2010 and were consistently an alliance partner in almost every event - but that’s not the case. In our club, we viewed success differently. We grew from a community of thirteen to a community of a hundred and thirty in just over 10 years. Unlike most rapidly growing organizations, this was not a problem because of our inclusiveness. The CircuitRunners mentality is not “pick from the best to be the best,” but rather “include everyone to make the best.” We were, and still are, an open community, accepting everyone, no matter their background. We welcomed each person’s talents and faults, and supported our fellow members towards becoming the best CircuitRunner they could be. No matter what the team - FRC, FTC, BEST, GRITS, or rookie league, they were a CircuitRunner first and foremost.

These standards still hold true today. Our open environment allows us to take in many newcomers to both robotics and FIRST. The new rookie team explores

non-competitive robotic applications to help first year members become acquainted with our club and the rigors of our other teams. It is common for a rookie to then progress to our GRITS (offseason FRC) team. Here, more experienced young members are mentored and learn the necessary skills to build a high-quality FRC robot.

The CircuitRunners have been given the opportunity to work alongside some of the nation's finest engineers. Several of our top sponsors, such as GE and Lockheed Martin, supply mentors to work directly with us, teaching us their skills. CircuitRunners also provides an environment where members can expand on their engineering creativity. One project is our t-shirt cannon, which we proudly display at competitions and outreach events. But our club is much more than that. Being a CircuitRunner is not about competition or even about the success of our projects, it is about the fun and joy of changing the world together.

Over the years, the CircuitRunners have maintained a reputation for supporting others. Whenever we arrive at competitions, other teams know we are glad to lend them a hand. For us, competitions are not about winning; they are about having fun, meeting new people, and connecting with other teams. It is not uncommon to see members socializing with other teams. We are very active within the local FIRST community, working closely with teams such as GENIUS Robotics, 100 Scholars, and Mays RBot to host events such as FLL workshops, FTC scrimmages, and social events.

In addition to hosting events, CircuitRunners share our passion for robotics on an even wider scale. In the past 5 years, we have mentored ten FLL teams, started numerous FIRST teams, and never once failed to give help to a team in need. Furthermore, the teams the CircuitRunners have started and assisted have been very successful. For instance, the CircuitRunners helped create the Walton Robotics team, which won the Chairman's award at the 2013 Peachtree Regional. We have worked with the GENIUS robotics team for many years, and they recently won the third place Inspire award at the FTC state competition. We know that our devotion to helping FIRST grow and our passion to assist others are the main ingredients for success over the last decade. We believe that seeing these efforts fruit is what really makes a team great.

The CircuitRunners participate in many humanitarian efforts. We have volunteered at the Atlanta Food Bank, having fun as we packed box after box of food for those in need. One of our most successful fundraisers to date was a canned food drive for the homeless in the Atlanta area. In 2010, after the devastating Haitian earthquake, the CircuitRunners collected supplies to send to the victims. The CircuitRunners also work closely in the community, partnering with many organizations within our school such as Habitat for Humanity. In the past five years, the CircuitRunners have logged over 5000 service hours

giving back to the community.

One of the special programs the CircuitRunners supports is Robochixx. This all-female program, sponsored by Women In Technology, focuses on encouraging women to be active in the fields of STEM. Student-led, and consisting of about 20% of the club, the organization provides a supportive environment for female CircuitRunners to gain hands-on experience in STEM. One of the long term goals of the Robochixx program is to build a "dancing" robot that would mimic human movement. While still in the beginning stages of planning, ideas such as using Kinect or gyroscopic technology have been discussed. In addition to engineering projects, Robochixx holds seminars in which guest speakers talk to young female students to encourage them to become involved in the areas of STEM.

We have worked on fantastic events with our generous sponsors to pursue a commitment to inspire the next generation of robotics students. We partnered with Cobb EMC, a major sponsor, to put on annual LEGO building competitions that engage hundreds of students, parents, and volunteers in various engineering activities. In 2009, the CircuitRunners had the pleasure of presenting a letter to the governor that urged for federal help in spreading the message of STEM to younger students. In 2012, working with mentors from Automated Logic, the CircuitRunners partnered with the Walton and Kell teams to host an exhibit at the DragonCon convention. While the other teams demonstrated their robots, the CircuitRunners were on a FIRST Q&A booth, eagerly engaging passersby in spreading the message of FIRST.

The CircuitRunners had a chance to reach a much wider audience when we partnered with the Atlanta Dream, GE, and several of our local FRC teams to exhibit our robots at a professional basketball halftime show. We displayed our excitement for robotics, STEM, and FIRST to thousands of people and hopefully motivated many of them to become involved in related programs. But our event-based outreach did not stop there. The CircuitRunners are working with the high school to be able to shoot our t-shirt gun at basketball and football games to excite both home and away spectators, and have been asked by the University of Tennessee to shoot t-shirts at college basketball games with crowds of over 20,000 fans.

These were daunting events, and naturally, teenagers are not used to performing in front of such large crowds. Learning how to present to large audiences was one of the countless skills learned as a CircuitRunner. The seniors who graduate act nothing like they were as meek freshman – the transformation is magical. Part of this is due to the effort that the club puts into building public speaking skills, consequently boosting members' confidence and self-esteem. We practice continually so we feel comfortable talking to

potential sponsors, partners, or mentors. Everyone learns how to be an assertive leader while continuing to be a team player.

As I leaned back into my chair, I remembered the competition days, reminiscing that exhilaration that passed through the crowd. Whether we were competing or hosting events, you could find CircuitRunners dancing side by side with other teams, having a good time regardless of our performance. We were always among the loudest to cheer, and always among the last to go home.

The blood, sweat, and tears I put into robotics was well worth it. From the people I met at competition to the parents, teachers, and mentors who supported us, the level of impact the FIRST program made on my life has been tremendous. I consider my time with the CircuitRunners to be four of my best years, and I know many other CircuitRunners do too. It is because of their heavy involvement in the FIRST community - volunteering their time by helping to organize, referee, and judge events, or even just lending a helping hand to teams in need- that CircuitRunners make such a significant impact on the world. Most alumni have continued on in the field of STEM, some attending Yale, CalTech, and MIT, and even becoming doctors and NASA engineers.

“Well,” I finally responded to my little sister, coming out of my reminiscent reverie. “It can do whatever you want it to do…”