

The Steel Talons have always understood that our team mission encompasses more than simply building a robot. Our team believes that in order to create a community that supports robotics and STEM, we have to do our part to mentor young students as well as fellow FIRST teams. Over the past year, the Steel Talons have reached out to students interested in robotics throughout our community and the world in order to encourage new and young teams to pursue success in FIRST robotics and all that they do.

Our team has hosted annual summer robotics camps for the past two years for elementary and middle school students in and around Katy, Texas. What started as a fundraising opportunity for our team quickly evolved into a chance to connect with our community and future robotics students. Through these camps, the Steel Talons work hands-on with young, passionate individuals and teach them how to problem-solve, act as leaders, and build and program their own LEGO robot. Our camps are able to impact a wide range of students by motivating them to pursue a future in STEM and providing them with the opportunity to work with experienced, dedicated individuals on our team. Being able to connect with and inspire a multitude of students enables us to pass our knowledge down to a new generation of students, carrying on our legacy.

Inspired by the successes of our summer programs, this year our team has strived to find new outlets to promote robotics and create connections with many children interested in robotics. Our team hosted our first “Girl Power” night to highlight opportunities for girls to pursue STEM careers. Through this event, female Steel Talons mentored a group of young girls, increasing their interest in robotics by encouraging them to accomplish various challenges. Through our careful guidance and support, we encouraged these young girls to explore STEM-oriented activities and future careers.

The successes of our previous robotics programs have also led our team to seek additional opportunities to connect with our community. The Steel Talons recently developed a partnership with a local art studio in our hometown to create a new LEGO robotics with the goal of inspiring students to explore robotics during the school year. Our student teachers have worked closely with our partner to develop a weekly curriculum to engage students and provide a quality opportunity to learn to build and program LEGO robots for a variety of objectives. This young program has already been incredibly successful for our team and has allowed us to work with a talented group of young students to hone their engineering, programming, and problem-solving skills. Our team is continuing to strengthen our relationship with local partners to provide further opportunities to promote robotics programs in our community and provide our own team members with additional chances to interact with and excite young students about working with robots.

This past summer, the Steel Talons received the incredible opportunity to volunteer in Ecuador for an entire month. We were presented with this opportunity after one of our team members approached us and explained how he was going to Ecuador during the summer to get Arduino training from an engineer, Mr. Cordova. We agreed to accompany him on his trip in hopes of volunteering around the country and spreading the excitement of STEM and FIRST.

Through this, we were able to impact four cities and over 200 children throughout the trip. Our team held multiple camps over the course of each location including LEGO, Arduino, and art camps. One of our most important projects on this trip was our work at an orphanage called Remar. Remar is an orphanage that takes in children, single mothers, as well as those who cannot take care of themselves. They rely on donations and volunteers to run their facility and only have a small, but amazing, bakery to generate some money. After having a tour of Remar and falling in love with all that they do, the Steel Talons took it upon themselves to hold robotics camps and art camps for the children, while completely redoing their playground. We repainted all of their old, rundown walls into bright, artistic walls where, on some, they were even able to draw on themselves. Additionally, we fixed their broken soccer goals, bought them new soccer balls, got them a volleyball set, and painted them a brand new hopscotch floor. We came on this trip in hopes to volunteer in a few places and hopefully help create the excitement of robotics and STEM, however, after the trip ended, we realized that this trip meant so much more than just volunteer work. We were able to greatly impact hundreds of children and their families as well as an entire country. We had people approach us asking, “Aren’t you that robotics team from the states?” We soon realized that we went from helping children in our camps, to helping an entire nation grow their interest in robotics.

Our team has also expanded our efforts to inspire new robotics teams around our own country. We have had multiple students with connections to dedicated adults approach our team about receiving guidance and support from the Steel Talons in their early meetings, and we have worked to guide these young teams in the right direction in order to learn as much as possible and participate in their own robotics events. One student of ours is working closely with a young LEGO robotics team to guide them through their first season, and we are also talking with a group of young, interested students wishing to form another LEGO robotics group in our hometown. We have also partnered with a first-year robotics team in California who are working with more advanced robots and we are in the middle of teaching them the foundations to create a successful and stable team structure in addition to learning how to build and program their robot. Our efforts to form these teams and raise awareness of robotics throughout our community and the country are only beginning, and while we have enjoyed working with these young teams and hope that they enjoy their own successful seasons, we are also looking to the future and seeking out new chances for our team to inspire students interested in robotics and to teach all that we know to a new generation of robotics teams.