

Chairman's Award - Team 6823

[Print](#)[Close](#)

2020 - Team 6823

Team Number

6823

Team Name, Corporate/University Sponsors

Lubar Family Foundation/Hamilton Family Foundation/Krenz & Company/Rockwell Automation/Milwaukee Tool/UL/Total Mechanical/Briggs & Stratton&Univ School of Milwaukee

Briefly describe the impact of the *FIRST* program on team participants within the last five years.

Through the FIRST program, our team provides an outlet, ... Gracious professionalism has inspired our students to acquire internships at local companies, and more than 90% of our graduated team members are currently pursuing STEM related fields. Our system of mentorship fosters a robust culture of family unique to our FRC team, providing a place to call home for every one of our diverse team members.

Describe the impact of the *FIRST* program on your community within the last five years.

Inspired by the edict of gracious professionalism, FIRST has given our team the opportunity to promote STEM to disempowered members of our community. In 2019, we began working with Operation Dream, an organization that provides educational support to inner-city youth. Female leaders of 6823 started a "Women in STEAM" program, which in November 2019, worked with a local science center and University of Wisconsin-Milwaukee to connect over 2,000 girls in STEM at an outreach event.

Describe the team's methods for spreading the *FIRST* message in ways that are effective, scalable, sustainable, and creative.

Our commitment to spreading the FIRST message is exemplified in every outreach program we undertake. We use partnerships with organizations that drive the amelioration of education for underprivileged students as the basis for our influence. Team members work with the kids and teach them programming skills with appraised learning platforms games. Additionally, we mentor younger FLL teams and encourage creation and success in possibly participating in FRC when they reach high school.

Describe examples of how your team members act as role models and inspire other *FIRST* team members to emulate

FIRST fosters an environment of professionalism, striving to make leaders. Within the school community we have inspired the creation of multiple younger FIRST teams. We also worked closely with a local rookie team mentoring them, and giving them a suitable place to practice. We host our own FTC qualifier giving the community a place to gather, compete, and share knowledge. By mentoring the FLL team we encourage younger students to partake in robotics and grasp the fundamentals of the program.

Describe the team's initiatives to help start or form other FRC teams

Since we have only been a team for a short period of time, we have only had the opportunity to influence very few teams. We strive to inspire new FRC teams by showing students how beneficial the program is to their communities. At the moment we are currently focusing on developing and mentoring FLL Jr., FLL, and FTC teams with younger students to allow them to familiarize themselves with the necessary skills to continue into FRC robotics.

Describe the team's initiatives to help start or form other FIRST teams (including Jr.FLL, FLL, & FTC)

Since our FRC team began in 2018 we have started three FTC teams, two FLL teams, and one Jr. FLL team. Between the different teams we have created we have been able to influence 100+ students on the team alone. Partnering with our school we introduced both FTC and FLL as a graded and credited class. This class allows students who would not be able to participate after school a chance to participate in FIRST program. This class also allows our FRC team to mentor both teams during the school day.

Describe the team's initiatives on assisting other FIRST teams (including Jr.FLL, FLL, FTC, & FRC) with progressing through the FIRST program

As a team we mentor various FIRST teams that we have started, and we introduced a robotics class into the school day. It allows us to mentor more and open up our workspace to our mentees and let them get experience in the workshops. We now mentor two local rookie FTC teams. Our initiative to mentor other teams within the FIRST community and program is very high, which is why even as a young team we find it extremely important and beneficial to mentor multiple rookie and non rookie teams.

Describe how your team works with other FIRST teams to serve as mentors to younger or less experienced FIRST teams (includes Jr.FLL, FLL, FTC, & FRC teams)

In addition to working with FLL teams, we have also aided in the creation of three FTC teams, along with volunteering to mentor two others. This has enabled us to teach younger students what it means to be involved with their community and with other teams in order to foster a greater relationship with the people around them. After our first FTC team was made, the motivation didn't stop there. Two more teams were formed because of us, and now we currently proceed to mentor FTC team 17223.

Describe your Corporate/University Sponsors

Our partnerships are very unique, and although our team has not been around for 5 years yet, we look to make long term bonds with our sponsors and partners. Our goal is to make strong and reliable partnerships with organizations looking to make a difference for kids today. Some of our closest partners include a safety partnership with UL innovation and Medical Makers. We express that we want long term partnerships in our sponsorship letter that we send out to companies.

Describe the strength of your partnership with your sponsors within the last five years.

Over 95% of alumni from our team have gone into various STEM related fields. In part the amount of alumni in STEM related fields is due to the support given by many different local companies such as Rockwell Automation, Milwaukee Tool, and UL. These companies have graciously given us many of the different skills we use on a daily basis. We are able to become familiar and family-like atmosphere that connects our team more to each other.

Describe how your team would explain what FIRST is to someone who has never heard of it

FIRST gives students the opportunity to grow in the STEM field and explore interests and careers. For example, the simple skills such as talking to people allowed many of our teammates to reach out to major companies and create relationships that can help each of us in the future. The team has also gained a better understanding of critical thinking, adaptability, innovation, and problem solving with the help of FIRST.

Briefly describe other matters of interest to the FIRST judges, if any

One of the main focuses of our team for outreach is helping those in need. We developed a partnership with an organization called Medical Makers, which supplies people in need with medical technology that they otherwise would not have access to. Our team gets the chance to be a part of something that is more than just robotics and shows how important it is to look past building a robot and helping others around you while encouraging fellow community members to do the same.

For FRC teams older than 5 years, briefly describe your team's broader impact from its inception.**Team Captain/Student Representative that has double-checked this submission.**

Mackenzie Petersen

Essay

Team 6823 utilizes student-based programs to create an infrastructure of knowledgeable, diverse individuals who can effect positive change within their communities. Over the course of three years, we have had the opportunity to work with many different people and families within our community. Their contributions to the team dynamic and unyielding support are the backbone for our success as a team. In order to carry on this legacy, our team members influence others through mentoring and coaching. The mission is to make students active participants in robotics as well as leaders in the community. We accomplish this through several different programs, and our work with FIRST. Ultimately, the team strives to inspire the future of the FIRST community and in turn have a global impact on learning and discovery.

TOMORROW

In accordance with the ideals to FIRST, our team has worked with Operation Dream, which is an organization that provides educational opportunities for underprivileged children in the greater Milwaukee area. During our clinics, we work with groups of kids ranging from ages five to seventeen, introducing them to FIRST and simple concepts about technology. For example, our main code learning platforms include Dash N Dot and Scratch. We teach the fundamentals of autonomous code, which could possibly assist them with a future class or career choice. They will be ready to face the rapidly occurring technological advancements in store for the future. Additionally, they were able to openly express their creativity with the lego mindstorm robots they designed with their newly formed skills.

Summer is a time in which many of our team members assist students with the creation of semi-autonomous code and the building of a functional robot. As a result of the program, a multitude of memorable relationships form and many students further their interests and knowledge in STEM related fields. Following the theme of code learning, we have also helped explain different aspects of code and proper engineering techniques for three different FLL teams. During the FLL season, participants learned how to inspire others to be science and technology leads and innovators who are confident in themselves and focus on giving back to the community that empowered us.

In addition to the FLL teams, we have also aided in the creation of three FTC teams, along with volunteering to mentor two others. This has enabled us to teach younger students what it means to be involved with their community and with other teams in order to foster a greater relationship with the people around them. After our first FTC team was made, the motivation didn't stop there. Two more teams were formed because of us, and now we currently proceed to mentor FTC team 17223.

In terms of inspiring a culture of robotics in Milwaukee and fostering healthy competition, we make sure to do both. Annually our FRC team hosts an FTC qualifier. This qualifier alone brings over 20 teams and 2,500 participants. Since only a few teams are able to host, it gives our team a sense of accomplishment and fulfillment to know that we are helping and giving back to our community that gave so much to us in order to allow us to become the leaders that the FIRST program expects of us.

Realizing the lack of participation of students with demanding extracurricular activities, our team has also integrated a new FIRST robotics program as part of a student-driven class. This allows our student athletes to participate in sports along with having the opportunity to experience stem- related activities. It is within this class that students learn the skills that FIRST program has to offer, such as gracious professionalism and diversity. Every year this class teaches new skills to over 40 students offering a unique experience to every student who participates.

WOMEN IN STEM

There was a noticeable lack of women participating in our team. To help resolve this female leaders from our team began a Women in STEM program. The program follows the basic ideals of FIRST engaging young girls in many different STEM related activities. Our FRC team has taken the Women in STEM program to a local STEM museum called Discovery World. This was a major event where women of the greater Milwaukee area gathered to share different skills that broaden their knowledge of STEM. Women in STEM was designed to make women feel empowered about their roles in the increasingly technologically advancing world. Over 30 members are working hard to increase the numbers of girls within FIRST. In addition, we had over 1,500 girls in attendance at the Discovery World event alone.

EXTEND

While still growing our Women in STEM programs, together we began to reach out to more kids throughout our broader community. We started locally with FTC Grafton and FLL at USM, and now are extending our hand of knowledge and capability to helping underprivileged people around the world. Medical Makers at USM is the first high school chapter of this organization. The partnership began because of our drive to accomplish the FIRST mission. An opportunity that our team has been fortunate enough to have received was to work with an organization known as Medical Makers. Their mission statement is, "A Medical Maker is anyone who wants to use their heart, hands, and mind to make healthcare better. Apply your creativity and compassion to make life-changing, sustainable solutions as part of our global community. We encourage people of all ages." FIRST has allowed us to be able to learn advanced STEM skills. As a team it was decided that we would like to work with or form an organization where we could use our skills to give back to our larger community. Medical Makers works with many different companies and organizations around the world to design and create affordable medical care devices. Participants on the team have been able to work on creating UNICEF child development kits that normally cost anywhere from 150 to 350 dollars for a much lower cost. 6823 Members devote time and energy to designing and prototyping devices that will aid healthcare providers and suffering patients across the globe. From toys to complex devices, our approved CADs are printed in developing countries to hospitals to help people in need of medical assistance and work with Syrian White Helmets and Doctors Without Borders.

Essay - page 2

Continuing to give back to our local community, we have future plans to bring our FRC robot from the previous season to Children's Hospital. At Children's Hospital, our team will be taking the robot around the hospital floor delivering small gifts and toys during family night to the children who have to stay in the hospital for long periods of time.

TRIBE

Over 95% of alumni from our team have gone into various STEM related fields. In part, the amount of alumni in STEM related fields is due to the support given by many different local companies such as Rockwell Automation, Milwaukee Tool, Krenz and Company, and Underwriters Laboratories. These local companies have graciously given us many of the different skills we use on a daily basis. This helps to create a more familiar and family-like atmosphere that connects our team more to each other instead of allowing our team to foster a relationship that is strictly surrounded around building a robot and moving on.

BEYOND GRATEFUL

Wildcat Robotics is beyond grateful for the opportunities and knowledge given by FIRST. Not only as a team have we been able to create a family, but we have also been able to impact so many others. By being able to give back to our many different communities and the broader world, our students have been able to learn and develop new skills. Our goal is make sure that STEM is accessible to all areas and continue to spread the ideals of FIRST throughout our time as a team.