

Chairman's Award - Team 3478

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

2019 - Team 3478

Team Number

3478

Team Name, Corporate/University Sponsors

PrepaTec San Luis Potosí/General Motors/BOSCH/EKK Eagle/Fundación Azteca de Grupo Salinas/BRIKO Robotics&Tecnológico de Monterrey Campus San Luis

Briefly describe the impact of the *FIRST* program on team participants with special emphasis on the 2018/2019 year and the preceding two to five years

Over the years, through coming and passing generations, we've earned values such as teamwork, leadership and passion. Subsequently, all of the past team members got into college and most studied a career related to STEM. Part of the graduated students ended up partaking as mentors of LamBot and, as a way to spread their skills in other states of Mexico, some of them created their own teams. Being part of the FIRST community has let us gain abilities that we wouldn't have acquired anywhere else.

Describe the impact of the *FIRST* program on your community with special emphasis on the 2018/2019 year and the preceding two to five years

On the last thursday of every month we attend our local museum to show and encourage people of varying ages to join FIRST. Also, schools invite us to participate in their science fairs where we present the team and the community what FIRST is. We have the privilege to teach the elderly and kids with chronic diseases, lower resources and diverse capacities programming and tech. We made a robotics camp for 100 children, where 30% of them lived in one of the most dangerous suburbs in our country.

Team's innovative or creative method to spread the *FIRST* message

With the aim of strengthening the relationships between FIRST Latam teams, our team introduced the FIRST Robotics Fest (FRF) in 2014, where activities and conferences take place yearly, also some Hall of Fame teams collaborated through video conferences . In 2018, more than 15 teams attended the event. Since 2015, when we created The Robotics Day on October 22nd approved in our State, we make conferences and activities to promote FIRST via social media.

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

We've received teams in our workshop in order to promote gracious professionalism by sharing advise, from our experience to the knowledge we've acquired in some of the Top Off-Season's in the world. We know the first year is hard, so we contact every Rookie team in the world to aid them with guidance and by learning from each other's mistakes and achievements. Additionally, we have a weekly video conference to talk about our progress with Adambots, Village Bulldogs, Robovikes and CyberCats.

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

To promote the FIRST community, we've visited schools in our state such as Apostolica and Motolinia, among others, to inhibit the creation of new teams. We've supported them in every step of their journey, as we do with teams 7037 MinerZ, 6170 Vitronik, 5133 Blue Steel, etc. To amplify robotics in Mexico, we motivated Dr. David Noel, former national principal of the Tecnológico de Monterrey, to sign a document stating that every campus must've a FRC team, since then 32 teams have been created.

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

To overcome social stereotypes and develop inclusion, we are in the process of opening and FLL team conformed by down syndrome children, partnering with Familia en Movimiento school. We already have General Motors' support and are planning on collaborating with a neurologist about certain abilities that the team members can gain in competition. We are also proactively following and learning about FTC so that we can efficiently teach more to new prospective teams.

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

We've been active via social media by posting informative and helpful videos about how the competition works and applicable recommendations. Whenever a team needs help, we always offer our workshop as a place to learn and grow as a team. We also offer video conferences with teams from all around the world to provide help. Every year, to strengthen bonds and offer our help, we approach all Mexican teams by sending messages and talking with head coaches.

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)

To make our help accessible and easier for Rookie Teams, we created "Rookit", which is a Youtube series focused on the first-year experiences that teams may go through. We created a team of mentors named supported by three of our sponsors (GM, Briko and ATOM), to guide and provide with money, material and courses to our region teams conformed by Abtomat 3480, Blue Ignition 3526, Voltec 6647 and Vitronik 6170.

Describe your Corporate/University Sponsors

We embrace the importance of sponsors, as well as our institution Tecnológico de Monterrey, and we wouldn't be what we are today without them. Our team is made up of 6 sponsors (antiquity ordered); GM, Briko, EKK, Fundación Azteca, ATOM and SindMex. A majority of our sponsors span across technological fields- Fundación Azteca, a prominent TV network in México, being the exception. Briko, ATOM and SindMex support LamBot with mentors while the remaining sponsors provide monetary support.

Describe the strength of your partnership with your sponsors with special emphasis on the 2018/2019 year and the preceding two to five years

Communication is a paramount aspect of a business partnership between teams and sponsors. In our case, GM invites us to their annual IT Fair where we show the project to other companies, we also go semiannually to EKK to talk about our seasonal projects. We make an annual party in which we show gratitude to our sponsors, in order to communicate directly and assure them to send our weekly progress report. Yearly, our school invites us to "Familia Tec" where we offer activities to the attendees.

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

FIRST, For Inspiration and Recognition of Science and Technology, is an international STEM competition made up of diverse challenges for bright young minds. But more than that, it's a community in which its members of all backgrounds and origins practice Gracious Professionalism, Coopertition, build their innovative character, find their passion, and create relationships to last their lives. LamBot participates in the FRC (15 -18yrs) tier, in which all teams have 6 weeks to solve a challenge.

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

Our team is always looking forward to improving other teams' performances. Having said that, this past December 17th and 18th, we made the first Unofficial Off Season by a Mexican team completely organized by both team members and ex team members. Six teams attended the event and all throughout the event teams discussed and shared ways to improve themselves. We're glad to have given MinerZ 7546, a rookie this year, their first FIRST experience. Official Mexican Off season 2019 coming soon.

Team Captain/Student Representative that has double-checked this submission.

Monserrat Canseco

Essay

Picture a place where one can truly be himself, where one can gain new abilities and knowledge, where ideas are respected and infinite, a place where people find valuable friends, where one discovers himself- a place that really demands the best. We found such place through FIRST, an international community that nourishes us with its values and educates us through STEM competitions- we call this place LamBot 3478.

It all began 9 years ago when 32 teenagers in San Luis Potosi dreamt of upholding México's name by international recognition through innovation and participation in FIRST. Today, LamBot is formed by 49 students who still share the same dream.

None of our dreams, projects, and achievements, would be possible without our institution Tecnológico de Monterrey and our sponsors' support. Thanks to General Motors, Briko, EKK, Fundación Azteca, ATOM and SindMex the road has been easier and exciting. We solidify our relationship with our institution and sponsors by partaking in events like Día de la Familia Tec and GM's IT Fair.

According to UNICEF in 2016, 4.1 million children in Mexico lacked access to basic education. Consequently, LamBot initiated RetoMex, a project representing Robotics all over Mexico. RetoMex widens STEM in public educational systems by implementing robotics courses in schools all over the nation- with all the equipment needed supplied by small Mexican companies like Briko Robotics. Today, more than 7,000 children from 19 states have been impacted by our project and it has been such a success that RetoMex is now an independent enterprise that sponsors us to this day. In a recent move to improve RetoMex and widen the help offered, RetoMex will offer scholarships to outstanding students so they can have the opportunity to partake in internships and be a part of FIRST.

For our efforts in RetoMex, we received the Eugenio Garza Sada award a year later- the most prestigious award in our institution for outstanding scholars with considerable impact on Mexican society. As part of the prize, money is conceded in order to continue the project and benefit the children. To increase its influence, we attended the Foro de Consulta Nacional, where we presented our project to not only people who attended the event, but to México's current secretary of public education.

In order to expand FIRST within our institution, in 2013 we made an agreement with the school's principal to open an FRC team in every campus of Tecnológico de Monterrey. Thanks to this initiative today we are 32 teams all across the country driving our goal. As this implementation stabilizes, LamBot and a team of mentors have orchestrated a conjoint force to succor Abtomat 3480, Blue Ignition 3526, Voltec 6647, and Vitronik 6170; with money, materials, and courses. We're set on involving children from kindergarten to middle school because we know how important it is to get familiarized with STEM from a young age. For this reason we often visit different schools in our state; Colegio de Bachilleres SLP no.26, Agnes Gonxha, Apostolica, among others. Impacting a total of 1800 students, we develop enthusiasm in science and technology.

Being aware of the potential and capabilities that the Mexican youth have, we organize different summer camps that reach around 1000 kids from diverse social backgrounds with interactive experiments and dynamic activities related to STEM.

Apart from all the experiences and relationships one forms in FIRST, one of the most impactful benefits its members receive is the opportunity to earn a place in a renowned university. With that said, all of the past senior team members have gotten into college and most are studying or have studied a career related to STEM.

In an effort to strengthen the relationship, communication, and collaboration between FRC Mexican teams, LamBot created FIRST Robotics Fest in 2014, where conferences are given between teams to boost Gracious Professionalism, also some Hall of Fame teams collaborated through video conferences. Additionally, activities take place which help teams work more efficiently as a FIRST community and establish stronger bonds with one another. Because of the impact we produced in 2014, the event changes host yearly with more than 15 teams attending it.

This year we created the unofficial LamBot off season. In this event, 8 teams, including 1 Rookie, came from different states of our Republic. Although it was a small event it was the beginning of a greater step for Mexico's FIRST community. We're so excited to host the first official off season organized by a Mexican team this 2019.

Cooperation is a strong value in our team, we seize every opportunity we can to support any team that needs it. In different occasions, we've received teams in our workshop in order to guide them on their FIRST journey, from how to build an efficient chassis to how to expand STEM in their community. As the number of teams increases every year, we contact most Rookie teams via Skype, with the aim of giving them the best tips and tricks to get the best experience out of their first year. To make our help more accessible, we decided to create "Rookit", a series of YouTube videos in which we share our common mistakes and the process we followed to reach our achievements.

We've been invited to IRI and Chevy Champs, Off Seasons commemorating the most remarkable teams of the season, we're proud to be the sole foreign competitor. Being the fortunate team with access to such experience, we looked for ways to share this new knowledge with teams back home in Mexico. In 2017, we went to México's debut FIRST Global whose vision is empowering youth from all over the world to be part of STEM.

Essay - page 2

Facing the situation that women have faced in history and continue to battle through, we have taken the initiative to balance the scales by implementing the project GIRLable. We went to a shelter for girls with dysfunctional families, where we gave a conference and activities with Legos. We taught 50 girls how to program in Scratch and also made a series of videos interviewing the first generation of women engineers in Mexico. In order to make a national impact, we gave a conference about women in STEM organized by the Mexican government and former president, Enrique Peña Nieto, called Codigo X.

Dean Kamen said in 1989 "to transform our culture by creating a world where science and technology are celebrated..."- that's why we want to follow FIRST's vision unencumbered by age and diverse capabilities. We attend Familias en Movimiento where we upbringing children with Down Syndrome by enacting interactive activities such as Lego Mindstorms and dynamic games, abiding by FIRST's vision, for the younger participants. It's a common misconception that technology is a part of the newer and upcoming generations. LamBot shatters this generalization by visiting retirement homes and aiding their transition to a more interconnected community with their families and peers. Every childhood must be full of joy, knowledge and fun. With the purpose of accomplishing that, we visited a children oncology center, place where we impart robotic courses that go in hand with FIRST. The gift of sight is one that everyone should be able to enjoy, that's why the team along with GM achieved the awardance of three surgeries to three lucky visually impaired kids- one of which has made remarkable progress and has gained the ability to witness the beauty of the world and all the wonderful things in it.

To honor our passion inside our country, in 2015, we created the "Robotics Day", celebrated on October 22nd. To celebrate it, our team organizes the yearly "Science and Technology week", in which conferences about FIRST and STEM are held in our school. We also make activities along with FRC Mexican Teams via social media. We have the privilege to live in a country rich in culture. Promoting our folklore, every November 2nd we celebrate the Day of the Dead (Día de muertos), a Mexican tradition in which we commemorate those who have passed away. That's why this year, following our team's tradition of remembering people in the FIRST community, we made an altar in honor of Mark Leon- a major influence for LamBot. Also, each December, we're part of the "Megaposada", a Christmas event focused on giving presents to elementary students with low resources. With the purpose of introducing our community to STEM, we go to our local science museum every month where we impact approximately 1,000 people across all ages and explain FIRST and LamBot.

To broadcast our passion and have a more easily reached users, we enjoy being active on social media. Our Facebook community is integrated by 5,000 people, our new Instagram account already has 820 followers and 2,214 in Twitter. LamBot was featured in the book "FIRST Robots", written by Vince Wilczynski and Stephanie Slezzycky, in which they chose 30 teams to share their excelled manufacturing processes. We're very proud that Forbes magazine recognized LamBot as the best latin american team. With the purpose of documenting our journey and helping other teams, we created LamVlog a series of weekly YouTube videos. We also compile another series of videos where we, in collaboration with teams from across the globe, share tips and tricks to achieve a better robot performance and social impact.

We consider that a team can only be formed based on the support of each other, and this has only led us to be the family that we're today. Within every step of the way, we learn new things that we're willing to share with whomever we can reach and encourage others to develop our same passion. As we keep growing, we want to make FIRST part of everyone's life, even though we undergo hardships. LamBot is a team that has adversities, but we refuse to see them as something that can set us back, we take them and create new opportunities because we believe that "Victory goes beyond winning".