

Bearcat Robotics - Season Recap

By Cedric Serio

No match record can show how well we did this season, or how much we learned. Though our robot's name, "Mistakes Were Made," is our season in a nutshell, the lessons we learned have been well worth the effort. And make no mistake, we did very well. At kickoff in January, we were given a multifaceted game with many challenges, and four months to build a robot. From the basic drive base given to every team, popularly called a 'cockroach bot,' we built our quirky masterpiece, no mean feat for a rookie team. We brought our contraption to Bayou Regional, beginning our year's competition in New Orleans. We quickly adjusted to the friendly atmosphere, even providing key programming aid to a more experienced team, aid that set them on track to a decent qualifying position. Our robot performed up to expectations, scoring in even the most challenging positions. Our building skills and teamwork, despite low ranking, soon caught the eyes of the judges. Looking beyond rank, they awarded us Rookie All-Star, a prestigious award given only to deserving first-year teams. This award is what earned us a spot at the FIRST World Championship.

Crossing the threshold into Houston, we passed into another world. The sleek, expertly engineered robots that surrounded us seemed to never miss a beat, scoring so speedily that the judges were forced to change the rules to allow for more scoring positions. We watched and learned, taking notes for future years on how to reach such an amazing level. Though by no means competitive, we passed the entire competition never falling to last position, holding our own and beating half of the other rookies. In the end, our positions as 71 of 78 allowed us to even beat a team who won a competition to reach world's.

This season is not in any way, shape, or form the end of our work at the STEM Center. Our ambition aims for the stars, and we strive to at least shoot the moon. After witnessing first-hand the incredible robots built by the top FIRST teams in the world, we plan to test new features on our own half-kaputt contraption to be able to implement them on future robots. With mechanisms such as omnidirectional movement and minor vision processing, as well as quite a bit more driving practice, we plan to take Bayou Regional by storm next year.

The robot field is not where our team's influence stops. Reaching beyond the walls of the STEM Center, we are energizing our students and rallying interest in STEM. One student, a brilliant aspiring engineer, has seen disappointingly low grades this year. "I just didn't care," he confides. Since he has joined robotics, however, teachers tell of a drastic increase in effort. His explanation; "Robotics gave me a reason to work. Now I have a goal and use for learning."

This sentiment permeates beyond the best and brightest. Our team has a place for all, even those minimally interested in STEM. Our marketing team earns valuable experience fundraising, promoting, scouting at competitions, and taking notes for teammates during robotics conferences. Many of our team members are not top of the class, and we accept them whatever their situation. Due to close proximity to our builders and programmers, much of our marketing team plans to take the field in one or other of the disciplines. These are students who

have never worked with computers in their life. Now, they strive to learn these arts themselves, with an internal motivation that cannot be replaced. Our team is spreading STEM knowledge and seeding a drive that only the best of teachers can instill through universal and unbiased acceptance and exposure.

Our arm reaches out to even those commonly left out of STEM; girls. It is somewhat of a class joke in Eco-car and Mrs. William's Engineering classes. One period of engineering has no girls, while the other is decidedly boy-dominated. The Eco-car team is similar, with a total of three girls spread across the team that spans three grades. Robotics is not like that. The roster has a total of 25 students, 14 of which are girls. We hope to continue this trend far into the future, and bring girls back into the STEM side of Ruston High.

The friendships made and lessons learned are what we are most proud of. The unique spirit of 'gracious professionalism' at FIRST tells a poignant story of how much we can achieve if we work together. No team refuses another aid, and often they offer before they are asked. Fifty seconds after a part request, yes, we timed it, teams were already in our building area, offering materials and suggestions. One team in particular we formed a close bond with through both of our two competitions this year. Even when we compete against each other, we are always opponents, not enemies. Just imagine how the world would be if this was true of everyone.

We already have our ambitious sights set on the future, with many plans to proceed. Overwhelmed by interest in STEM and programming, we plan to hold robotics programming workshops over the summer to teach any and all team members the basics of coding. We also have our eye on the Ruston Junior High, with a plan to establish a younger correspondent to our robotics competition there either for the coming season or the next. Many of our students are also eyeing Ruston High's meager supply of STEM classes, and mean to lobby for a full section that such a well-respected school deserves.