

Minnetonka High School Robotics | Team 3082 | Chicken Bot Pie | December 2018

### LAST SEASON

On behalf of FRC (FIRST Robotics Competition) Team 3082 "Chicken Bot Pie" of Minnetonka High School, we wanted to update you on the work we have done within the off-season. We are so thankful for your help which has brought us to this point. This past January, a new objective was released with a retro video game theme. The competition was called FIRST Power Up. The tasks included placing Power Cubes (milk crates) on scales of various heights, and climbing a pull-up bar at the end of the match. In January and February, we designed and built our robot. Thanks to the support of our sponsors, we were able to have our most successful season ever. culminating in our first appearance at the World Championships in late April.

# OFF-SEASON COMPETITIONS

We've had a busy fall off-season!
Between September and the end of
November, we competed in three
off-season competitions. At our first
competition, the East Metro
Collaborative Competition, we were
selected to be on the 1st alliance
with the ERRORs and the Fighting
Calculators. With this alliance, we
secured the first event win in our
team's history.

For our second off-season competition, the Minnesota Robotics Invitational, we had new students drive the robot. The new students on the team also gained competition experience. At our third tournament, we competed with a newly built robot and won the Team Spirit Award for our enthusiastic cheering during the competition!

### **SWERVE ROBOT**

The team decided to build a new robot for our third off-season competition, Minne Mini. In the span of three weeks we worked tirelessly to create a robot that incorporated multiple swerve modules, allowing for a different way of driving. Essentially, a swerve module allows for movement in any direction, compared to the usual car-like driving. We were able to utilize this movement at Minne Mini. Overall, it ended up working after multiple software iterations, some tweaking, and a better understanding of its capabilities in play.

We gained lots of attention for our swerve bot, as it is the first time a Minnesota team has used one in competition. We are excited to bring all of this new experience into the next season!

### WHAT'S NEW?

In addition to our success at competitions, we have also had great success with expanding our team. We have recruited around 20 new members, bringing our total membership to 45. Many of these new members have gained experience on the team through off-season competitions and projects. We worked on building two new parts carts to replace our old one. We designed, modeled and built our own carts, helping everyone gain experience. We also participated in our school's homecoming parade through Excelsior, representing not only our team but also the STEM community. The float was space themed to represent 2019's Destination: Deep Space game.



# 2019 SEASON







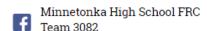




For the 2019 season, the game will have a space theme and will be called "Destination: Deep Space". The content and goal of the game will be released on January 5th, and from there we will build our new competition robot until February 19th. We are registered to compete in two competitions in 2019. The first competition that we are going to is the Great Northern Regional in North Dakota. The second competition is the North Star Regional in Minneapolis. Our team is hoping to raise another \$25,000 to support our build and get us to the tournaments. We are looking forward to the 2019 season, and we hope you will continue to support us in our efforts. Thank you for supporting our team and STEM education!

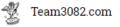
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