

With the passing of another exciting competition season, Team 955 has made significant improvements within all aspects of our team, from our design and build process to our fundraising.

Fundraising

This year, our team has refocused our fundraising efforts by putting greater emphasis on two major fundraisers, the Pancake Feast in the fall and Flower Baskets in the spring. This year, to make our Pancake Feast more accessible to a greater portion of the general public, the event was hosted at the Corvallis Elks Lodge. Furthermore, we changed the timing of this event from a Saturday morning to a weekday evening. This new location and time along with larger selection of raffle basket prizes led to doubling our profits for this event from last year. We were excited to see many team alumni there as well as the Superintendent of the Corvallis School



District, Ryan Noss. Like last year tickets to the fundraiser were pre-sold which has greatly increased the amount of people in attendance, but in addition we increased our pre-selling efforts by having multiple dates of selling tickets at a local grocery store, Market of Choice. On some of these dates we even had a robot on display to generate interest.

Students Serving Food at the Pancake Feast Fundraiser

Currently we are in the middle of our Flower basket fundraiser. In partnership with Davis Family Farms we are selling 10" flower baskets from April 16th through May 21st. Each of these vouchers cost \$30 and are valid between May First and June Fifteenth. This voucher also acts as a 10% off coupon on that can be used on any other items purchased during the same visit. If you would like to order a flower basket for you or your business please email cv.raiderbot@gmail.com to order one.



Competition

After completing our design and build process to finish our robot, our team attended the first competition of the season at Wilsonville. Unfortunately, we came in 35th out of 38th this in part was due to our robot intake mechanism not reaching our expectations. Fortunately, our performance improved significantly at the second competition due to changes made to both our robot and game strategy. These changes led us to being 12th out of 36th at the end of qualifier matches. This high ranking led to us being selected for an alliance which allowed us to participate in the elimination matches. Despite this significant improvement, we were unable to continue onto the Pacific Northwest Championships. Even though we had a short competition season there were major successes. At both of the events we attended we won the Entrepreneurship Award for our summary business plan. We were also a runner up for the safety award at Lake Oswego.

Our Competition Robot

Outreach

This year our team continued its tradition of outreach to both middle and elementary schools of the Corvallis School District along with attending various other community events. So far this year, our team has attended The OSU AI symposium, DIA (Diversity In Action) Celebration, and Linn County CAN Fair along with other events throughout our community. There is still a large number of events we plan to attend before the 2019-2020 school year such as the Benton County Fair and da Vinci Days this summer. Space permitting, at all events we bring three activities to allow our community to interact with our team. One of the three major activities we bring are gumdrop bridges, where we challenge students to use just gumdrops and toothpicks to construct robust structures. The other two activities are showing students how to use temporary rivets and allowing attendees at the event to drive our competition robot. These events act as key opportunities to teach our community about FIRST and our team. Furthermore, at feeder schools these events aid us in recruiting members for the team in coming years. Lastly, these events allow us to introduce students to engineering through the

activities we bring to these events. If your business or organization is interested in having our team attend one of your events please contact our business team through the following email address: cv.raiderbot@gmail.com

BroccoliBot

BroccoliBot is a mentor-led summer project in which CV robotics and Bots of Prey Robotics (Team number 7448) collaborate to create a fully autonomous broccoli harvester. This project began in 2016 when a team 955 mentor challenged our team to create a cost effective automatic broccoli harvester. Before BroccoliBot, there were no cost effective broccoli harvesters that could be used to to reduce the amount of manual labor used broccoli harvesting. Working on this project has allowed our team to utilize skills learned in FIRST to solve a real world problem. This project has attracted national attention by gaining funding through the USDA Speciality Block Program. This year we will be designing and building our sixth prototype of the BroccoliBot while our 5th prototype is tested in the field. Our team has filed a provisional patent for the vision system our team uses to identify the broccoli head.



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Students Working on BroccoliBot Last Summer

Our most recent version, the v5, is capable of determining the level of growth of the broccoli from it's color as well as cutting broccoli stalks at a precise height with 1/8th in. accuracy. Furthermore BroccoliBot collects the broccoli it harvests and and processes it into florets which normally requires the broccoli to be sent to a processing plant. This project will allow our team to influence our community's agricultural economy for the better through the use of STEAM skills.

Sponsor Thank You's

Due to our success in fundraising this year, we managed to obtain donations from a large number of both local and national companies. All donations, from a ukulele to cash, are greatly appreciated; however, our team would like to give special recognition to those who donated a significant amount to help our team. All sponsors, regardless of the amount of the donation, are

pivotal to the success of our team and further enable our team to compete in competitions and support our community each year.

List of Sponsors:

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