



Iowa City Robotics

Off-Season Newsletter

Greetings and salutations sponsors! Thank you for graciously sponsoring our program this year; this is the first newsletter of the 2023-2024 year.

Summer Outreach Events

At the Iowa City Arts Festival we taught children basic design skills using isometric drawings. We used the CAD software Autodesk Inventor to help teach them these skills and created LEGO mini figure coloring sheets to reinforce the drawing perspectives. We showed off Corn on the Claw, our 2023 season robot, and talked with many people throughout the day. Then during June and August we held two Junior Bots Camps; with an introduction to Python Programming camp and a Junior Bots robotics camp (the August camp also had a Junior Bots Challenge camp for kids who already had the knowledge of Junior Bots). During these camps we taught the kids the basics of programming, design, problem solving, and the basics of software and robot engineering. At the end of the week they showed off a final project to their parents. Additionally, we invited the Iowa Children's Museum to show off the ways they use robotics. This was a great experience after we have been to their STEM nights on multiple occasions. In late August we attended the BAE Open House at their new campus. We demonstrated our robot and allowed the visitors to operate our arm system. After the event they very graciously gave us a tour of their new building.



The Roboteer Rumble



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In late October we went to Tremont, Illinois to participate in the Roboteer Rumble graciously hosted by Team 2481, The Roboteers. After a series of 30 qualification matches, we ended as the Captain of the 8th Seed Alliance. Our partners were teams 4096 Ctrl + Z and 9082 No Limit. With this alliance we placed 4th overall in the competition. Additionally we used this



opportunity to train new members on the experience of a competition and to give them the opportunity to practice at scouting (data analytics and predictions), drive team, and match observations. Finally, we used this to test out our new Swerve Drive base; Using our old robot arm mechanism on this new drive base, we were able to gain programming and drive experience with the system we will be using in the season. This helped us gain invaluable knowledge with the drive back prior to the start of the season.

Fall Outreach Events

Earlier this fall, we went to North English, Iowa to help assist in a city-wide STEM initiative to increase the amount of STEM opportunities in the schools of their rural community. At the event, we showed off our competition robot, and challenged students to race the robot in a relay, and answered pre-submitted questions. The students were also able to interact with the robot by feeding it game pieces that it would then drop into the childrens hands to catch. Also this fall, we partnered with a physical therapist in Iowa City and GoBabyGo, a nonprofit dedicated to helping people with disabilities, to convert a toy car into a mobility device for a young child. He is roughly 1 and a half years old with muscular dystrophy. To finish out our off-season activities, we have a series of Girl Scout nights scheduled to help Brownie and Junior troops meet their robotics badge requirements and will be hosting a free winter break camp at the Iowa City Public Library.

