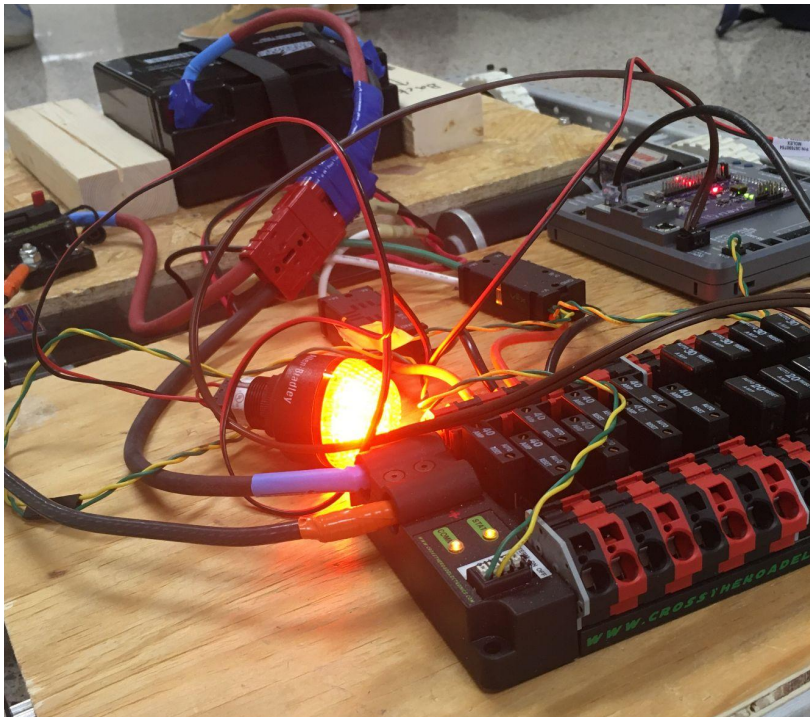




Urbana Cryptohawks #8726

Busy Season, Busy Hawks

2022



Kitty Lin

As we get more into the FRC season of 2022, our crew is busy building, testing prototypes, programming robots, and making sure everything is running along. With new members and new ideas, this is the first time UHS Cryptohawks will be participating in an FRC season.

Kick-off!

The FIRST Robotics Competition this year is called Rapid React. The

theme of the game is based around transportation related to the goal of the United Nations Sustainable Development. Matches consist of 2 alliances with 3 teams for a total of six robots on the field at a time. Each match revolves around 'Cargo'. Robots must retrieve Cargo from around the playing area and score it into the Hub. The Hub sits in the center of the field and contains a low goal 3 feet above the ground, and a high goal 8 feet above the ground. Teams receive points for delivering cargo into either goal of at the end of the match teams can also go to the Hanger and attempt to pull themselves off the ground from a set of raised bars to earn more points. For even more points teams can attempt to climb

from the lower bars to the higher bars. Link to Game Animation which helps show how the game is played:

▶ 2022 FIRST Robotics Competition RAPID REACT Game Animation

Prototyping and Robots

Our season currently consists of multiple phases; after watching the game animation video and after discussing different options for a couple of days, we split into groups and began prototyping ideas. After about two weeks of prototyping with PVC and plywood, we got back together and presented the prototypes. After some debate about what we wanted most out of our robot, we decided on the following strategy. We decided to make an adjustable flywheel-shooter so we could score in the high goal from multiple positions on the field. For climbing at the end of the match, we decided to use a passive mechanism that would allow us to climb onto the second bar: the highest bar we could without having to traverse between bars. Currently, we are focused on finalizing our build and preparing for the competition.

Public Relations

We have started working on our Safety Manuals, sponsorship packets, and videos. Our team has also started participating in the Chairman's Essay. Students have started reaching out to elementary and middle schoolers to participate in our Python classes as an introduction to the world of STEM.

Thank you!

We greatly appreciate every supportive gesture from sponsors, parents, and mentors as it helps us make sure our team can live up to its potential. Shout out to our sponsors:



Keep on track with us throughout the week by following us on social media:

Instagram [@uhsrobotics](#)

Website: [Urbana Robotics Team](#)

Youtube: [Cryptohawks - FRC Team 8726 - YouTube](#)

