

Team 2129 Ultraviolet

Southwest Highschool FIRST Robotics

Weekly Newsletter - Week of March 7th, 2020

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Hitting the Ground Running After Grand Forks!

On Monday, Gints and Naomi went to the capitol to advocate for STEM in schools. They brought the outreach robot and played catch with anyone who was willing. They were there alongside C.A.A.T.S., an FTC team. Other than almost hitting a senator, the capitol visit was a success.

Now that we had some experience with driving and competing with the competition robot, we were then ready to reflect on what went well and what could have gone better. We had a meeting where we planned out the month of March up until the Northstar competition and what we would do on which days. After completing the first week of this schedule, we have begun the modifications. So far we have moved the sensors that sense how many balls have entered the bot so less balls get stuck. We also installed a new camera so we can see inside the robot even if it is at the other side of the field, and started to prototype other new modifications. We are also continuously improving our intake and climbing mechanism, since those were our two biggest issues at Grand Forks.

Another problem we came across at Grand Forks was the spacing of the power cells, which has been solved after some savvy programming by Nate and an implementation of encoder-based spacing, rather than timer-based spacing. Encoder-based spacing uses magnets to count the rotations of the belt's wheel, rather than using a timer to attempt to space the balls evenly. The new-and-improved spacing can be seen to the right.



The new spacing.

In other, non-build team news, we have implemented a new handwashing policy in the robotics shop! Every team member is required to wash their hands upon entering the room to prevent the spread of the new and ever spreading COVID-19 disease.