

6645A Autonomous Editor

This year we early on wanted to implement a graphical autonomous editor. This editor would allow us a hybrid between the reliability of odometry autonomous and the development speed of capture replay autonomous. In our vision we wanted to be able to simply plan a route, have it visualized instantly, and then generate code that we could paste in to our codebase and modify to move systems like intake. We accomplished this goal.

Our autonomous editor visualizes a field on the left, showing robot initial position and final position in the current version. On the right is a code box allowing simplified commands to be entered that will move the virtual robot. And in the terminal, outputted after every new command is a new code version that will run the designed autonomous using our odometry system when placed into the autonomous routine area of the code.