

# Online Challenge: VEX Robotics Short Essay Challenge

My name is Matthew Cinnamon and I am an eighth grader. I am on the Benton Robotics team, the BentonBots, team 1231C (a.k.a. The Conquerors). I have loved robotics, ever since I joined the team in 7<sup>th</sup> grade. Even when I was little I loved to build, Legos were one of my favorite toys. When I reached middle school, I learned about the robotics team and applied immediately, knowing I could test my creativity and building skills against other teams. I got to the first competition, for last year's game, Sack Attack, with a robot, that I will admit, could never possibly work the way I had imagined. I had a very complex robot design, but very little robotics experience, which is a recipe for disaster. However we somehow, by pure luck, made it to the Roboticon. We scraped our robot and started from scratch, this time making a much simpler scoop. We did OK at the Roboticon and I learned a lot from it, like keep your robot design simple, the more moving parts, the bigger chance of something going wrong.

This year we looked at what we wanted our robot to do, put together multiple designs, and narrowed it down to one by looking at the pros and cons of each. We did move some elements from one design to another, and scratched some completely. We came up with a robot that has a U-shape chassis, regular arm geared for lots of torque, and a caged conveyor belt intake. We have made our share of stupid mistakes, like not fully testing our autonomous program from each starting tile. We've also had batteries die midway through a round. Mistakes, even stupid ones are great learning opportunities and teach you how you can improve for future competitions. One thing is for sure, were making sure neither of those happen again.

Robotics has taught me how to program, valuable teamwork skills, and how to make an efficient, yet simple design. I discovered I loved programming when I took the Vex 1.5 summer camp last summer. Because of that I am applying for the programming track of the Forest Park High School Information Technology program.

I also give back to my elementary school's robotics team by mentoring them twice a week. In the past they only participated in the First Lego League competition, but this year they began using the new platform, Vex IQ, which has been a lot of fun to work with. I have been teaching 4<sup>th</sup> and 5<sup>th</sup> graders how to program in RobotC and working with them on robot design and building. I plan to be either a mechanical engineer, or a computer programmer, hopefully, something that combines the two. This is how robotics has changed my life forever.