Part I: Describe the belt drive application on your robot. What advantages did it offer in solving the application challenge?

Our robot, nicknamed Voodoo 1 after the fighter jet from the movie Top Gun, is a small shooter robot. Our drive control consists of a tank drive system running of two standard CIM gearboxes. The gear boxes have two pairs of gate belts attach on both side, which then connects to white tread wheels. These wheels, along with the gate belts, helped our robot react quicker than our competition. We were fast, easily maneuverable, and nearly glided throughout the arena field. The gate belts also gave our robot drive enough traction to withstand oncoming defense robots trying to push us out of our shooting position.

Part II: Gates belt drives can be found in everything from agricultural equipment, to zoom camera lenses, to now bicycles. Describe how Gates powers progress and impacts your everyday life.

I actually have a gates belt inside a recreational mini-motorcycle that I use during the summer for dirt biking or strolling around my suburban neighborhood. The belt has teeth on it which is easy on the pulleys and has a very slick surface texture to it. The outer sides of the bands also have a small ribbed fix to it, which makes it vastly flexible and help for maneuverability.