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Our robot scores points by collecting rings on a post and putting them on the branches of the goals. The rings are pushed off of the post by a stand-off on a chain. This causes issues because the rings are only supported on one side of the post. Depending on which way we have the post tipped the final ring sometimes gets stuck. I designed a new piece in Fusion 360 to push the rings off the post. The piece I designed is shaped like a ring which forces the rings to stack uniformly. The way the piece wraps around the post allows it to support rings evenly. The design of the ring pusher includes flat spots for bolts on the otherwise round surface. The piece was created by making a cylinder and removing an arc shaped like a ring. Then I measured the size and placement of the holes for the chain and added them. I removed material from the walls of the ring pusher to decrease weight and print time. The holes were designed to be printed without supports. I then cleaned up the design with fillets on all the sharp edges. This challenge has given me the opportunity to keep my CAD skills sharp and I will continue to find uses for CAD modeling in the future.













