

Sumo-Robotics Competition

- An event hosted by Rowan IEEE annually
- There are 2 types of Sumo Competition:
 - ❖ Sumo-Robotics “Kit” Competition.
 - ❖ Sumo-Robotics “Scratch” Competition.
- Each team (usually of 4) must push the opponent’s robot off the ring.



1) Sumo-Robot Kit Competition

- Rules: The teams competing in the kit competition must use the provided “Zumo” robot and it must be built without external hardware modifications.

My Role

- Contributed in planning the strategy and testified it before the game.
- Helped in programming the robot using Arduino.

We won the First Place in the 2016 Kit Competition

Strategy: Spin 360 degrees to look for opponent.
Once the enemy's found, charge with full speed.



Figure 1: My teammates and I presenting the robot to the judges.



Figure 2: Our robot and 300\$ collected by winning the competition.

2) Sumo-Robot Scratch Competition

- Rules: The robots competing in the scratch competition may be designed and built in any way as long as the final result conforms to the rules.

My Role

- Participated in programming the robot and designing the robot's shield.
- Contributed ideas and effective ways to solve problems faced during the competition (i.e. overweighing and mal-function)

*We won the Third Place in the 2016
Scratch Competition*

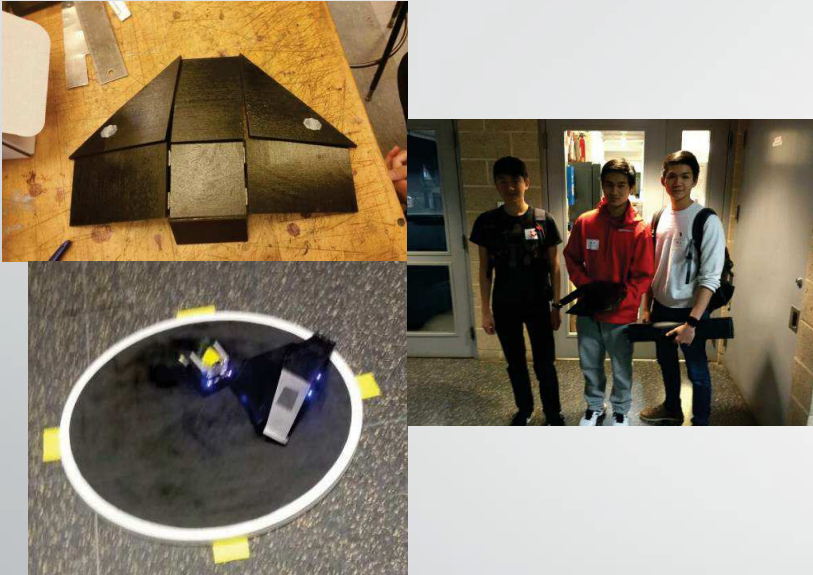


Figure 1: The "Bat Mobile" we used in the 2015 Scratch Competition.

Strategy: Find the edge of the ring, stay still as a dome so that the opponent will climb on and fall out of the ring.

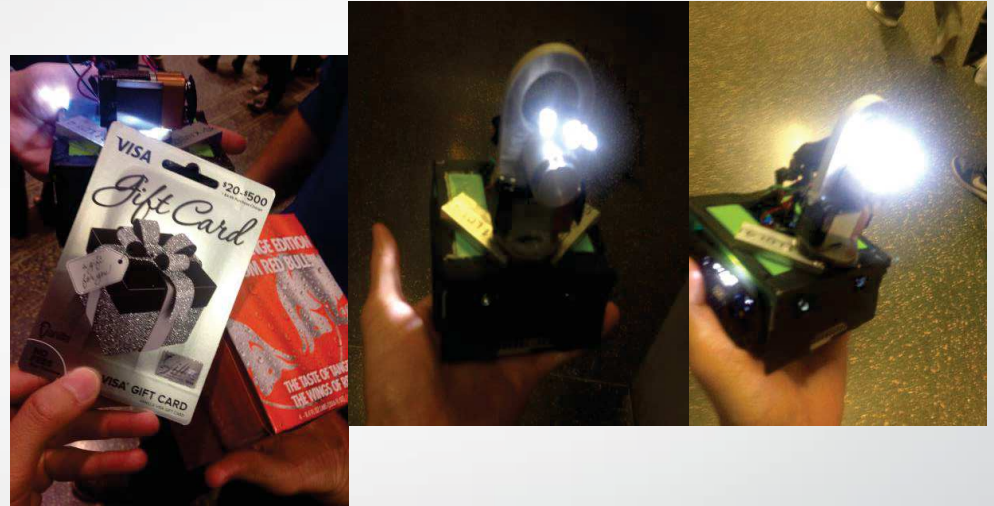


Figure 2: 150\$ collected for winning the competition and the robot we used in the 2016 Scratch Competition.

Strategy: Armed with white LEDs to disturb enemy's sensors; spin around and charge the enemy with full speed.