

The Day Robots Took Over the Park

By Camp Peavy
Photos: Tim Craig

June 17, 2007 perched high above the Pacific Ocean with the Golden Gate Bridge clearly in sight RoboGames "RoboMagellan" proved beautiful, competitive and fun. Four out of the five robots starting managed to touch the orange goal cone and the 5th got within 18 feet. Two did not start; dead PC104 board and grass too tall (i.e. wrong scale).

"RoboMagellan" is a navigational challenge covering approximately



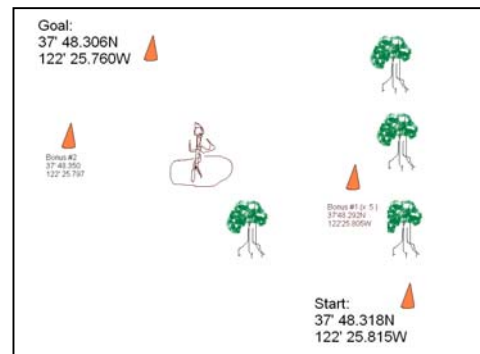
It was a beautiful day for robots and spectators alike. In the future robotic recreational devices will become commonplace; on this day we glimpsed that future.



The crowd followed the action closely; notice the similarity to golf.

300 feet or the length of a football field. An 18" orange cone is placed on a given GPS coordinate and designated the "goal". Robots are timed until they reach the goal. Optional bonus cones are offered which yield a fractional multiplier (.5x, .3x, etc) decreasing the total judged travel time. Robots are both failsafe with dead-man switches and must not cause damage to the environment. The RoboMagellan rules are owned and maintained by the Seattle Robotics Association.

The map was distributed at 12 noon. Competitors were allowed to walk the course, make measurements, and carry parts of their robots (GPS, etc) but not whole robots. At 12:30 we began with Bob Allen and Ted Larson of Ologic, inc. "Odyssey" which garnished a 3 minute 17 second run. RoboMagellan events take on the persona of golf competitions as large groups of people follow the robot like a popular golfer. More than one sunbather or



A map of the course is distributed 30 minutes before the event and contestants are allowed to walk the course but not the robots!



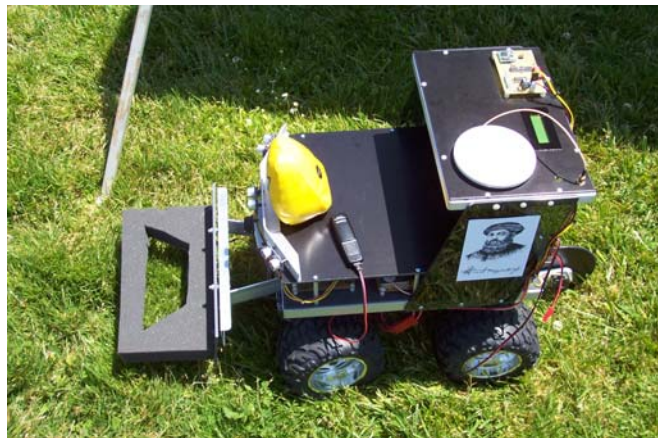
Bob and Ted's excellent "Odyssey" took Silver touching the cone in 2 minutes 12 seconds event time. It was run out-of-the-box from the Seattle Robothon in October.

electromechanical creatures to roam.

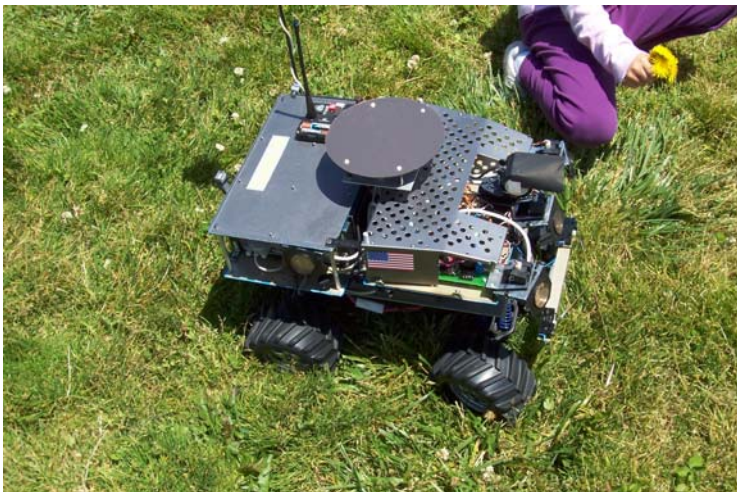
"Connan" by Robert Scheer and Jim Remington was the second robot up. They didn't really have enough ground clearance to get through some of the turf but this robot had some slick slip detection that helped it get out of numerous incidences of high centeredness. Its best run was the first which got within 18' of the goal.

picnicker had to wonder why are all these people were walking this way before noticing the cute little contraption leading the parade.

On Odyssey's second run it got caught up the "twisted tree". Now I do not know what type tree this was but I can tell you that it has lived a tortured life. It seemed to take delight in swallowing robots. The huge statue of Senator Burton near the goal also offered a visual Easter egg as well as different terrain (bricks) for our



Jim McGuffin and Doug Coral's "A3" successfully touched the "goal" after touching Bonus cone #1 (.5) for an event time of 3 minute 22 seconds.



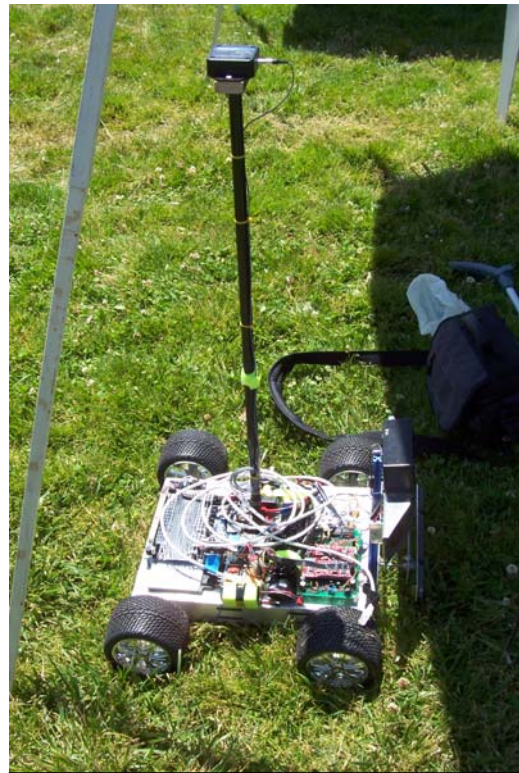
Mark Curry's "Intrepid" was the class of the field touching both bonus cones and the goal with an event time of 2 minutes 21 seconds; good enough for Bronze.

"Intrepid" by Mark Curry was probably the best robot on the course. On its first run this animated autonomous RC car lived up to its name touching both bonus cones and reaching the goal. After the fractional multiplier the event time was 2 minutes and 21 seconds. Intrepid's second run was slower as Mark decided to try touching just one bonus cone (3 minutes 11 seconds). He got caught by the twisted tree on the third run but still managed to make it to the goal. At this point a wedding had setup on the left side of the course and I just knew Intrepid was going to march right down that nice white silk

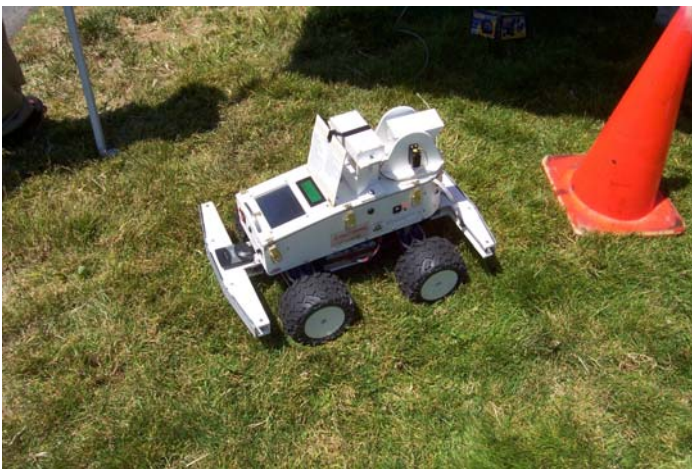
aisle... fortunately the robot turned right and went around the chairs (whew!).

Next up Jim McGuffin and Doug Coral with "A3" (I remember A1 from a few years back). A3 looked a bit like a Choo-Choo train with an odometer wheel on the back which came in useful as a wheelie-bar. A3 managed to touch cone #1 with a total time of 6 minutes 44 seconds which reduces to 3 minutes 22. The second run finished 36' from the goal and the third run... well let's just say the code change did not work out as planned. The robot went back and forth, round and round... not really going anywhere near the goal but entertaining the crowds no less.

The last contestants were the boys from Cal Poly: Scott Barlow and Tyson Messori. Using just odometer and camera SpyBot's this beautiful example of simplicity got very close to the goal before catching glimpse of someone's orange shirt and veering left around the rim of the crater about 96' from the goal. The second run was better... 27' from the goal. On the third run they nailed it with



Connan is clearance challenged but managed to make his way through the rough with some slick slip-detection technology.



The boys from Cal Poly took Gold with this 1 minute 31 second straight shot using just odometry and camera. "SpyBot" was a model of simplicity and sophistication.

a straight shot 1 minute 30 seconds.

At the end of the day Cal Poly's "SpyBot" took Gold, Bob and Ted's "Odyssey": Silver and Mark Curry's "Intrepid": Bronze. It was a beautiful day for robots and spectators alike. In the future electromechanical Frisbee chasers, robotic football catchers/throwers and all manner of robotic recreational devices will become commonplace. We are on the edge of innovation and on this day we caught a glimpse of it... we saw the future... we made the future... it was the day robots ruled the park.