

# The 19<sup>TH</sup> Annual Intelligent Ground Vehicle Competition

Oakland University  
Rochester, Michigan  
June 3<sup>rd</sup>-6<sup>th</sup>, 2011

## Autonomous Challenge

(Course length was 624 feet.)

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|---|-------------------|
| 1. University of Delaware<br>Distance: 565 feet<br>Time: 4:35 minutes<br>Award: \$3,000                 | Team: Warthog     |
| 2. Hosei University<br>Distance: 488 feet<br>Time: 5:00 minutes<br>Award: \$2,000                       | Team: Active 2011 |
| 3. Georgia Institute of Technology<br>Distance: 388 feet<br>Time: 3:52 minutes<br>Award: \$1,000        | Team: Roxi        |
| 4. California State University - Northridge<br>Distance: 375 feet<br>Time: 2:46 minutes<br>Award: \$750 | Team: Red Raven   |
| 5. Trinity College<br>Distance: 297 feet<br>Time: 3:45 minutes<br>Award: \$500                          | Team: Q           |
| 6. University of Central Florida<br>Distance: 266 feet<br>Time: 2:50 minutes<br>Award: \$250            | Team: Automaton   |
| 7. Bob Jones University<br>Distance: 176 feet<br>Time: 1:05 minutes                                     | Team: Firebrand   |
| 8. Missouri University of Science and Technology<br>Distance: 174 feet<br>Time: 1:31 minutes            | Team: Jomegatron  |

9. The Citadel Distance: 173 feet Time: 0:48 minutes	Team: CLETIS
10. United States Naval Academy Distance: 167 feet Time: 1:40 minutes	Team: Robo-Goat
11. Oakland University Distance: 134 feet Time: 1:17 minutes	Team: Botzilla
12. École de technologie supérieure Distance: 113 feet Time: 1:13 minutes	Team: Minotaurus
13. Worcester Polytechnic Institute Distance: 96 feet Time: 1:08 minutes	Team: Prometheus
14. York College of Pennsylvania Distance: 94 feet Time: 1:07 minutes	Team: Sparta
15. Bob Jones University Distance: 90 feet Time: 1:10 minutes	Team: Fortunatus
16. Tennessee Technological University Distance: 82 feet Time: 0:49 minutes	Team: Andros
17. Embry-Riddle Aeronautical University Distance: 47 feet Time: 1:00 minutes	Team: Reagle
18. Stony Brook University Distance: 41 feet Time: 1:00 minutes	Team: Tina 2.1
19. SUNY University at Buffalo Distance: 35 feet Time: 0:20 minutes	Team: Big Blue
20. Embry-Riddle Aeronautical University Distance: 27 feet Time: 0:11 minutes	Team: Molle Bot

21. Princeton University  
Distance: 25 feet  
Time: 0:21 minutes

Team: Phobator

22. Stony Brook University  
Distance: 24 feet  
Time: 0:19 minutes

Team: Project 14

23. German Jordanian University  
Distance: 9 feet  
Time: 0:08 minutes

Team: JO-CAR

### **Design Competition**

#### **Finalist**

1. California State University - Northridge  
Score: 407.56/480  
Award: \$3,000

Team: Red Raven

2. University of Waterloo  
Score: 403.78/480  
Award: \$2,000

Team: Indrik

3. Oakland University  
Score: 386.67/480  
Award: \$1,000

Team: Botzilla

4. York College of Pennsylvania  
Score: 379.33/480  
Award: \$750

Team: Sparta

5. Embry Riddle Aeronautical University  
Score: 378.33/480  
Award: \$500

Team: Molle Bot

6. University of Wisconsin - Madison  
Score: 341.78/480  
Award: \$100

Team: Singularity

#### **Design Group A**

1. University of Wisconsin - Madison  
Score: 1082.33/1200

Team: Singularity

2. Oakland University  
Score: 1034.67/1200

Team: Botzilla

3. Princeton University Score: 1028.67/1200	Team: Phobetor
4. Worcester Polytechnic Institute Score: 1023.67/1200	Team: Prometheus
5. Embry Riddle Aeronautical University Score: 1003.33/1200	Team: Reagle III
6. Trinity College Score: 967.00/1200	Team: Q
7. Rose-Hulman Institute of Technology Score: 932.22/1200	Team: Moxom's Master
8. Bob Jones University Score: 914.67/1200	Team: Firebrand
9. Stony Brook University Score: 879.00/1200	Team: Project 14
10. M.S. Ramaiah Institute of Technology Score: 870.00/1200	Team: MOKSHA
11. University of Delaware Score: 833.33/1200	Team: Warthog
12. University of Cincinnati Score: 632.33/1200	Team: Bearcat Cub II
13. Virginia Polytechnic Institute and State University Score: 560.00/1200	Team: VT-MAGV
<b><u>Design Group B</u></b>	
1. California State University - Northridge Score: 1157.33/1200	Team: Red Raven
2. Embry Riddle Aeronautical University Score: 1146.00/1200	Team: Molle Bot
3. City College of New York Score: 1106.00/1200	Team: CATA
4. Missouri University of Science and Technology Score: 1093.67/1200	Team: Jomegatron

5. University of Central Florida  
Score: 1087.33/1200  
Team: Automaton

6. University of Illinois - Chicago  
Score: 1064.33/1200  
Team: Edt - Dyno

7. University of Texas - Austin  
Score: 1061.33/1200  
Team: Enterpras

8. University at Buffalo  
Score: 1029.33/1200  
Team: Big Blue

9. Bob Jones University  
Score: 1018.33/1200  
Team: Forunatis

10. German Jordanian University  
Score: 931.33/1200  
Team: JO-CAR

11. University of Massachusetts - Lowell  
Score: 899.00/1200  
Team: MCP III.5

12. Michigan Technological University  
Score: 713.33/1200  
Team: Techie II

### **Design Group C**

1. York College of Pennsylvania  
Score: 1033.83/1200  
Team: Sparta

2. University of Waterloo  
Score: 1016.00/1200  
Team: Indrik

3. Rutgers University  
Score: 992.67/1200  
Team: Navigator

4. The Citadel  
Score: 973.00/1200  
Team: CLETIS

5. Hosei University  
Score: 874.00/1200  
Team: Active 2011

6. Lawrence Technological University  
Score: 858.50/1200  
Team: vuLTUure

7. Bluefield State College  
Score: 839.17/1200  
Team: ARCHON

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|--|---------------------|
| 8. United States Naval Academy<br>Score: 825.33/1200           | Team: Robo-Goat     |
| 9. Tennessee Technological University<br>Score: 767.00/1200    | Team: Andros        |
| 10. University of Illinois - Chicago<br>Score: 710.00/1200     | Team: EDT - Kratos  |
| 11. École de technologie supérieure<br>Score: 689.33/1200      | Team: RS3           |
| 12. Georgia Institute of Technology<br>Score: 614.33/1200      | Team: Roxi          |
| 13. University of Cincinnati<br>Score: 574.67/1200             | Team: Bearcat Cub 1 |
| 14. University of Massachusetts - Lowell<br>Score: 444.67/1200 | Team: Stark         |
| 15. Stony Brook University<br>Score: 369.33/1200               | Team: Tina 2.1      |

### **Navigation Challenge**

- |   |                 |
|---|-----------------|
| 1. California State University - Northridge<br>Waypoints: 4/5<br>Time: 2:26<br>Award: \$5,000 | Team: Red Raven |
| 2. University of Central Florida<br>Waypoints: 4/5<br>Time: 2:43<br>Award: \$4,000            | Team: Automaton |
| 3. University of Delaware<br>Waypoints: 4/5<br>Time: 4:26<br>Award: \$3,000                   | Team: Warthog   |
| 4. Trinity College<br>Waypoints: 3/5<br>Time: 2:23<br>Award: \$400                            | Team: Q         |

5. Hosei University Waypoints: 3/5 Time: 3:27 Award: \$300	Team: Active 2011
6. Embry-Riddle Aeronautical University Waypoints: 2/5 Time: 0:59 Award: \$200	Team: Reagle III
7. University of Waterloo Waypoints: 2/5 Time: 1:51	Team: Indrik
8. The Citadel Waypoints: 1/5 Time: 0:08	Team: CLETIS
9. Oakland University Waypoints: 1/5 Time: 0:14	Team: Botzilla
10. Embry-Riddle Aeronautical University Waypoints: 1/5 Time: 0:18	Team: Molle Bot
11. Bob Jones University Waypoints: 1/5 Time: 0:27	Team: Fortunatus
12. École de technologie supérieure Waypoints: 1/5 Time: 0:30	Team: Minotarus
13. Worcester Polytechnic Institute Waypoints: 1/5 Time: 0:33	Team: Prometheus
14. Tennessee Technological University Waypoints: 1/5 Time: 0:47	Team: Andros
15. United States Naval Academy Waypoints: 1/5 Time: 0:51	Team: Robogoat

16. City College of New York Waypoints: 1/5 Time: 2:55	Team: CATA
17. Bob Jones University Waypoints: 0/5	Team: Firebrand
18. Missouri University of Science and Technology Waypoints: 0/5	Team: Jomegatron
19. Princeton University Waypoints: 0/5	Team: Phobetor
20. University of Texas - Austin Waypoints: 0/5	Team: Enterpras
21. Virginia Polytechnic Institute and State University Waypoints: 0/5	Team: VT-MAGV
<b><u>JAUS Challenge</u></b>	
1. Hosei University Points: 60 Time: 28 seconds Award: \$4,000	Team: Active 2011
2. University of Central Florida Points: 60 Time: 30 seconds Award: \$3,000	Team: Automaton
3. Oakland University Points: 54 Award: \$2,000	Team: Botzilla
4. University of Waterloo Points: 52 Award: \$1,000	Team: Indrik
4. Embry-Riddle Aeronautical University Points: 52 Award: \$1,000	Team: Reagle
4. University of Wisconsin - Madison Points: 52 Award: \$300	Team: Paradroid



4. Lawrence Technological University Points: 52 Award: \$300	Team: vulture
8. Trinity College Points: 51.5	Team: Q
9. Worcester Polytechnic Institute Points: 50	Team: Prometheus
10. California State University - Northridge Points: 30	Team: Red Raven
<b><u>Rookie of the Year Award</u></b> The Citadel Award: \$500	Team: CLETIS
<b><u>Grand Award</u></b> 1. California State University - Northridge Points: 72 Award: Lescoe Cup	Team: Red Raven
2. University of Central Florida Points: 54 Award: Lescoe Trophy	Team: Automaton
3. Hosei University Points: 48 Award: Lescoe Award	Team: Active 2011
3. University of Delaware Points: 48 Award: Lescoe Award	Team: Warthog
4. Oakland University Points: 32	Team: Botzilla
4. University of Waterloo Points: 32	Team: Indrik
5. Georgia Institute of Technology Points: 16	Team: Roxi
6. Trinity College Points: 14	Team: Q
6. Embry-Riddle Aeronautical University Points: 14	Team: Reagle

7. York College of Pennsylvania  
Points: 12

Team: Sparta

8. Embry-Riddle Aeronautical University  
Points: 8

Team: Molle Bot

8. University of Wisconsin - Madison  
Points: 8

Team: Singularity

9. Lawrence Technological University  
Points: 6

Team: vuLTUre