UCLA Robotics Project
2006/2007

Presenting:
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Winter 2006

UCLA Robotics Club
Introduction

- We integrate Electrical Engineering, Mechanical Engineering and Computer Science together in our projects so there is a lot to do in each field.
- All of our project teams design and build robots for events at RoboGames which will be held June 16-18 in San Francisco.
- Currently we are planning to enter with two robots:
  - The Battlebot
  - RoboMagellan
- **The Fire-Fighting robot was cancelled for Fall quarter due to no participants.**
Project Summaries

- **Battlebot**
  - 60 lb or 120 lb RC combat robot

- **RoboMagellan**
  - Larger (4’x4’) autonomous robot which navigates a 300’ outdoor course using GPS, image processing, and other sensors

- **FireFighting Robot**
  - Small autonomous robot which navigates a maze and puts out a candle.
Battlebot Project

- Building a combat robot in the 60-120 lb weight class as a joint project with ASME. Our weapon is going to be a powerful drum. We have designed our robot and now need to order parts.
- Mainly Mechanical and Electrical challenges.

- Team: Anna Davitian, Jeff O'Donohue, Steven Snyder, Marianne So, John Dimalanta, Ryan Fix, Clay McKell, Jacob Hull.
- We have applied for funding from the MAE Department as a joint project with ASME. Robotics received $78 from them.
RoboMagellan Project

- This is an autonomous robot that will be able to navigate outdoors using GPS waypoints, rangefinders, and a variety of other sensors. The robot must complete a 300 foot long course over varied terrain; avoiding trees, bushes, and other obstacles along the way. At the end of the course it must use a digital camera and image processing to locate and approach an orange traffic cone.

- Team: Jon Binney, John Propst, Greg Fiore, Jenny Ji, Virginia Yee, Alex Lea, Josephine Chen, Vishwa Gouda.

- We’ve been searching for corporate sponsors and have found two, RoboDynamics and Evolution Robotics, who have donated $250 to this project.
Firefighting Robot Project

• Our robot will navigate a scale mockup of a house, then find and extinguish a candle which represents the fire. The robot can be maximum of about one foot by one foot, and one foot high. The arena is approximately 8 feet by 8 feet square.

• We did not place last year, but with our new experience we are confident that we will this year.

• Team: was cancelled for Fall.

(Last year’s team)
Conclusion

- We hold monthly general meetings open to all students and each project holds weekly team meetings. More info about meetings and projects posted on our website:

  [www.seas.ucla.edu/robotics](http://www.seas.ucla.edu/robotics)

For questions, please email:

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