



Edina Robotics *FIRST* Team 1816  
6701 Hillside Lane, Edina, MN 55439  
[www.edinarobotics.com](http://www.edinarobotics.com)  
[edinarobotics@yahoo.com](mailto:edinarobotics@yahoo.com)

### About our team



Edina Robotics *FIRST* Team 1816, The Green Machine, is a group of approximately 35 students who utilize their interests in math, science, engineering, computer programming, and marketing to compete in the *FIRST* Robotics Competitions. The team formed in the fall of 2005 and had a very successful rookie year, winning the Wisconsin Regional Competition in March 2006 and the "Highest Rookie Seed" award at the Championship Competition in Atlanta in April 2006 for ranking 6th of 86 teams in the Archimedes division. This was the highest ranking of any rookie team in the Championship event.

One of the team's primary goals this year is to help get other Minnesota schools involved in *FIRST*. In 2006, ours was one of two Minnesota teams. In October, we exhibited at Governor Pawlenty's STEM (Science, Technology, Engineering, and Math) Summit for High School Students at the Science Museum of Minnesota. This venue allowed us to introduce high school students and interested teachers and parents to *FIRST* Robotics program. Many of the contacts identified at the STEM Summit went on to establish *FIRST* teams at their schools. The team also presented to Medtronic engineers to interest them in mentoring rookie Minnesota teams, and visited many area high schools with their robot. We are so pleased that there are now 16 registered *FIRST* teams in Minnesota!

## About *FIRST* Robotics competitions

Since 1989, *FIRST* Robotics (*For Inspiration and Recognition of Science and Technology*) has sponsored competitions to challenge youth to learn and apply engineering and science skills. Teams partner with local companies to receive mentorship from professionals in marketing, product development, engineering, computer programming, electronics, and manufacturing. Using a sophisticated kit of parts including motors, sensors, cameras, and electronics, teams build robots up to 5'-tall and weighing up to 120 pounds. Teams have just six weeks to design, build, and program their robots before shipping them to the competition site. Competitive game play is fast-paced, combining pre-programmed actions and radio remote control in a 1400 square foot arena. The 2007 game, *Rack n' Roll*, involves the placement of inner tubes on an octagonal moving 10' rack structure with "spider legs" at three heights designed to receive the rings, for a total of 24 legs. The game involves two Alliances, each with three robots, trying to outwit and outscore their opponents. See: [www.usfirst.org/robotics](http://www.usfirst.org/robotics).

*FIRST* Robotics is about more than building and fielding a robot. Participation in the *FIRST* program simulates the new product development and marketing cycle, providing a real life situation in which high school students can test and hone their science, technology, and marketing skills. *FIRST* engenders in its teams the culture of gracious professionalism in which teams that may compete with each other are also willing to be helpful in sharing knowledge and resources. The program also emphasizes collaboration of teams with corporations, both as a source of mentors and funding. Corporations that sponsor *FIRST* teams may have the opportunity to identify future talent for their organizations.

## Seeking sponsors and mentors



The Green Machine in action, 2006

*FIRST* challenges teams to seek corporate financial and mentoring support. To date, our major sponsors are Honeywell (which provided our robot fabrication facility), Medtronic, Inc., NASA, Geek Squad, Edina Education Fund, Kaemmerer Group, LLC, the intellectual property law firm of Schwegman, Lundberg, Woessner, and Kluth, Honeywell Retirees Volunteer Program, Dunwoody Institute, and the Student Council of Edina High School. Our expenses to build the robot and participate in the Wisconsin Regional and National Competitions in 2007 are projected to be \$46,000. To date, we are still seeking \$20,000 to cover expenses.

Some of the team's needs for 2007 include:

- Adult guidance on parts fabrication
- Adult volunteers with backgrounds in mechanical/electrical engineering, product design and modeling, AutoCAD, sensor technology, software development, project management and marketing to serve as mentors
- And, of course, funding

## Contacts

To connect with The Green Machine, visit us at [www.edinarobotics.com](http://www.edinarobotics.com) or write to us at [edinarobotics@yahoo.com](mailto:edinarobotics@yahoo.com) or 6701 Hillside Lane, Edina MN 55439.