



FRC Team
2199

ROBO-LIONS RUN FIRST LEGO FUN CAMP!

During the third week of July, FIRST Robotics Team 2199, provided a Lego Fun Camp to middle schoolers interested in learning more about FIRST and robotics. The camp was held at Oklahoma Road Middle School. In our inaugural year, thirteen enthusiastic campers registered for the week of fun!

Throughout the Spring and early Summer months, Robo-Lions team members met regularly to plan Lego Fun Camp. Sponsored by FARC (Freedom Area Rec Council), we were able to provide engineering challenges throughout the week and encourage team building and gracious professionalism.

Members of Team 2199 worked as camp counselors to campers ranging in age from 2nd to 6th grade. They participated in team Lego-building challenges, learned to build and program Lego Mindstorm robots, and prepared for and competed in a mini FIRST Lego League competition at the end of the week. The campers even got a chance to drive the Robo-Lions' own robot, which had competed in two 2012

"It was great to see middle schoolers working together so well — teamwork is a huge part of the FIRST philosophy."

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Robo-Lions Team 2199 poses with 2012 campers from Lego Fun Camp

Like many other FIRST teams, we sell energy efficient light bulbs. The Robo-Lions have been successful by selling the light bulbs not only to individuals, but also to businesses. The amazing thing about these light bulbs is that they are efficient in so many different ways; they are brighter than, and last longer than, compact florescent lights. Not only that, but they also are safer than CFLs because, as LEDs, our light bulbs do not contain mercury or any other dangerous chemicals. Our light bulbs are earth friendly, and user friendly.

And we share our green initiatives with the future Robo-Lions as well. Everyday during our summer camp, we had a craft for our campers, and one was to decorate reusable shopping bags. As they colored, we taught them about the importance of reducing the use of plastic bags, and reusing and recycling the ones they do use. The drawings ranged from Lego robots, to dinosaurs with the words "Go Green. Go Dino" written above them.

Ultimately, our goal is to teach as many people as we can about the importance of going green so that we can help our community to save money and protect their resources.

FIRST Robotics Competitions (FRC) combine the excitement of sport with the rigors of science and technology to provide students a "real-world engineering" experience.

~ www.usfirst.org

Contact us:
www.robolions.org

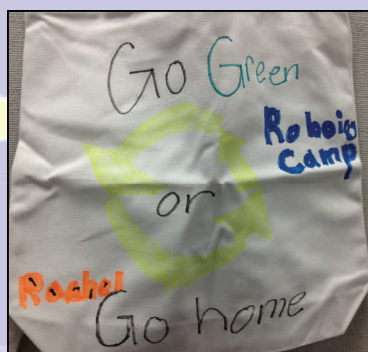
GREEN INITIATIVE

Reuse → Reduce → Recycle.

Everyone has heard those words before, and most people remember to recycle plastic bottles and cardboard boxes. But going green is a lot more than that, and the Robo-Lions understand that. We run a number of programs and fundraisers that encourage earth friendly behavior, and incorporate creative ideas. Team members have made collecting used ink cartridges fun, by turning it into a competition. In each homeroom at Liberty High School, we put a collection box, and gave the students very simple instructions:

collect the most, and we will give you donuts.

The ink cartridges were a hit! We collected over 200, and donated them to a recycling facility to be refilled. Even the collection boxes were reused, as they were old shoeboxes donated to us by Kohl's. We have plans to run the program again this winter.





AMAZING BABY & CHILD EXPO

The crowd attending the Amazing Child and Baby Expo, held in Historic Sykesville, were wowed by the Robo-Lions August 18th. The bulk of our activities at this wonderful community gathering stretched the whole length of the day. We began early Saturday morning setting up a tent where people could stop by to see

our robot and learn about *FIRST*.

Throughout the day we offered activities for people of all ages: Lego robotic sumo wrestling, button

making, and food to purchase and jewelry to try on and buy. The kids loved the robot sumo wrestling and they were particularly excited when, in one game, a robot self-destructed!

But that wasn't the big hurrah. Around midday, a space was cleared out for a large carpet and an adjustable

basketball hoop (similar to the floor of the fields we compete on at competitions). Robo-Lions were ready to show their stuff!

Like many of the robots built for the 2011-2012 competition season, ours can pick up and shoot foam basketballs, which we demonstrated for the crowd. Whenever a score was made, the crowd



went wild! Remember that I said that the kids loved the robot sumo wrestling? I think it is safe to say that they enjoyed the larger robot just as much. We let kids in

the crowd try to catch basketballs and feed them back into the robot's ball collector. They loved it when we would move the robot in their direction, making it appear that it was chasing after them. Every time that happened we would hear little excited shrieks of joy. Along with the various other interesting and fun vendors and organizations, the expo was a great success and a really fun experience. ♦

INTERNATIONAL

It isn't everyday that the Robo-Lions are asked to share their robot with an international crowd, but it does happen. On July 13th, team and robot were the guest speakers at the Carroll Christian Schools International Learning Exchange. Students from Shenzhen City heard about FIRST Programs and got a chance to drive one of the robots build for the Rebound Rumble game. They loved shooting baskets like pros!

Students also got to see FLL robots, and



ROBO-LIONS ORGANIC GARDEN

by Bridget D.

This summer, the Robo-Lions planted an organic vegetable garden as a part of their green initiative. After two days of hard work, they had cleared a small plot of land in the backyard of a mentor's house, and replaced the weeds and thorn bushes with red bell peppers, tomatoes, and cucumbers. To keep animals (especially deer) out of the garden, they also constructed a 6 foot tall fence around it and planted herbs like lavender. Though it took a while for the plants to grow, it was worth it to have delicious fresh vegetables. The team has big plans for the garden next year; although last summer the vegetables were mostly given to team members and their families, next year they will be donated to local food banks. ♦

talked to FLL veterans on the team about how they can get involved in *FIRST* when they return to China. As a token of thanks, the Chinese students presented the Robo-Lions with a hand-made squid (or maybe prawn?) made of small beads. It was a very special gesture, and a memorable day for all. We hope to see our new friends at Championship someday. ♦



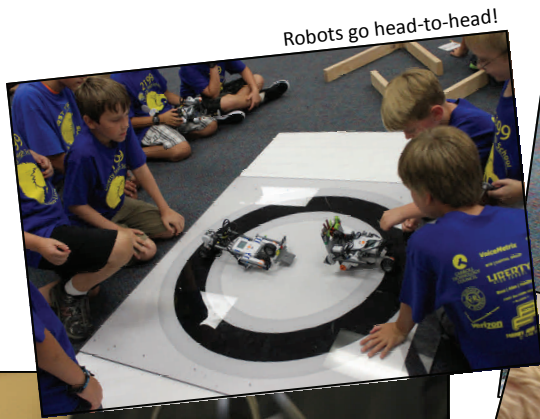
A FUN CAMP!

(Continued from page 1)

FIRST robotics regional competitions.

Not only did the campers gain experience in problem solving, teamwork, and gracious professionalism, but several of the students also showed a considerable interest in joining one of their own local FIRST Lego League teams. Most of all the campers had fun, and the Robo-Lions achieved exactly what they set out to do.

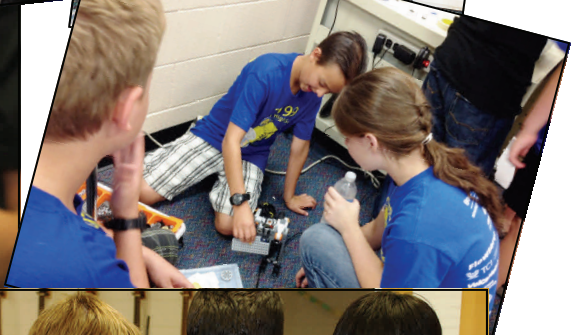
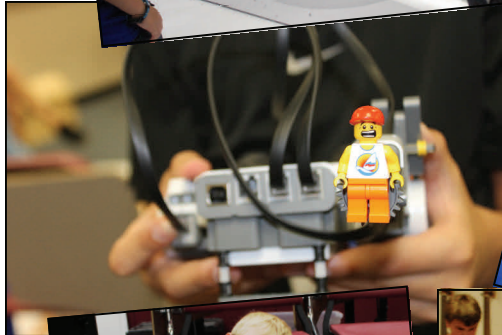
Providing a Legos Robotics camp has been a dream of Team 2199 and it was exciting to see it come to fruition this year! We hope to double the number of registered campers next year and continue to share the joys of engineering and technology with the community and promote interest in FIRST organizations. ♦



Robots go head-to-head!



Girls like robotics too!



Working together is a nice thing to do.

REALLY FUN RELAY

by Scott T.

Engineering Challenge #1: Catapults!



This June the Robo-Lions, Team 2199 participated in Relay for Life,

a community event that benefits the American Cancer Society through team fundraising that is used to raise money for cancer research. It was held at Liberty High School in Eldersburg. Despite the sudden rescheduling due to severe weather, 12 dedicated Robo-Lions were able to re-arrange their calendars and participate. They also brought their mascot, who was a standout during the Zumba demonstration—go dancing Lion!

The main activity of Relay for Life is the walking throughout the night. Each team was required to have at least one representative on the track from six in the evening to seven in the morning the following day. Throughout

the entire night, members from Team 2199 successfully met this challenge in helping the fight against cancer. Together, Robo-Lions exceeded our goal of raising a thousand dollars for the American Cancer Society. We look forward to participating again next year! ♦





ROBO-LIONS REACH OUT TO THE COMMUNITY

ROBOTICS COMES IN *FIRST* AT SCIENCE FAIRS, SCHOOLS, LIBRARIES AND MORE!



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Attending local science and technology events is something that the Robo-Lions do on a regular basis. During the school year we attend several local elementary school science fairs, where the students get to exhibit various projects that they have been working on. We also get invited to take our robot with us to libraries, sponsor events, and camps. At all these events, we share our experiences and give 'test drives' of the robot. The kids always have lots of questions, so we tell them about our robot and about *FIRST*, generally stressing the programs for younger kids like *FIRST* Lego League (FLL) and JrFLL.

Parents are also usually just as interested as the kids are, and want to know about when and where camps or activities may be held, as well as what teams are available for them to join. Everyone seems to loves catching a basketball 'pass' from our Rebound Rumble robot. As a result of our ongoing efforts, we keep our three FLL teams going and added two JrFLL teams and a new FTC team this year.



Sometimes we are invited to other events highlighting science and technology. The list of events for the spring and summer this year featuring our robot follows. You can see we are very popular!

- April 19: Freedom Elementary Science Night
- May 2: Eldersburg Elementary Groovy Science Night
- May 8: Carrolltowne Elementary Science Fair
- May 11: Family Fun Night at Resurrection-St. Paul School
- May 17: Booz Allen Hamilton Picnic
- May 29: Finksburg Library/Cranberry Station Elementary Reading Night
- June 19: Eldersburg Library Summer Reading Program Kick-off
- July 13: Carroll Christian School Camp (feature story)
- July 14: Wounded Warrior Project Concert featuring Joey D Cares Rock Orchestra
- July 26: Mt. Airy Library Star Wars Special Event
- August 18: Amazing Baby and Child Expo, downtown Sykesville (feature story)
- August 23: Liberty High School Back-to-School Night

