



13TH ANNUAL

BOT BRAWL

Metal gladiators fight it out to foster education!

by Dan Toborowski, with Brian Nave

The Central Illinois Robotics Club (CIRC) hosted their 13th annual Bot Brawl competition on April 13th during National Robotics Week. This year, CIRC was invited by Illinois State University to host the competition as part of their Family Science Day event which is designed to get kids excited about science and technology through hands-on activities and exciting demonstrations. The event took place inside the university's large sports stadium known as RedBird Arena, which provided lots of space and several unique amenities. The main theme of this year's Family Science Day event was "robotics," so along with CIRC there were also displays from FIRST Robotics teams, 4H robotics groups, local university projects, VEX Robotics Design System, and much more. This made for a terrific backdrop with huge crowds milling about all day. They marveled at the robotic carnage and also at the sophisticated displays of robotic autonomy.

The 2013 Bot Brawl included 1lb and 3lb combat events, line following and line maze competitions. Sumo included 500g and the 3kg weight class, and CIRC's own unique "Checkers on a Sumo Ring" design challenge. Competitor attendance was very high, especially in the combat robot classes. Hobbyists came from as far away as Nebraska to put their skills to the test against other builders from all over the Midwest.

CIRC unveiled a few new upgrades for this year's competition. These included a brand new match timer and combat arena lighting controller. The new controller illuminated different colors on multiple LED strips to indicate a variety of conditions. These included indication of competitor ready states, warning of trap door activation, and signal tap-outs. Competition organizers once again used a custom-built line

follower lap timer system which uses a webcam and flashlight with custom software to detect when robots cross the start and finish lines. This system proved very accurate, catching the movements of even the fastest robots with the smallest cross-sections.

UNPRECEDENTED SPONSORSHIP

CIRC was fortunate to receive generous support from numerous sponsors who provided

MAJOR SPONSORS

Dimension Engineering
DSP Robotics, Flowstone

Dynomotion

Hobbico

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Lakeview Research

Maxbotix

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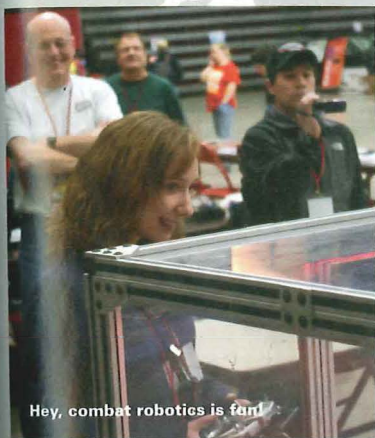
Solution Cubed

Wright Hobbies Robotics

Zagros Robotics



Combat robots were a huge hit with the kids.



Hey, combat robotics is fun!



There was time at the end of the day to host two rumble matches which several robots participated in.

Below: First-place antweight Guildestern disables second-place BuzzSaw for good.



The Robotics and Education Competition Foundation was in attendance demonstrating VEX to the visitors.



1lb antweight Firaga balances upside down like a top.

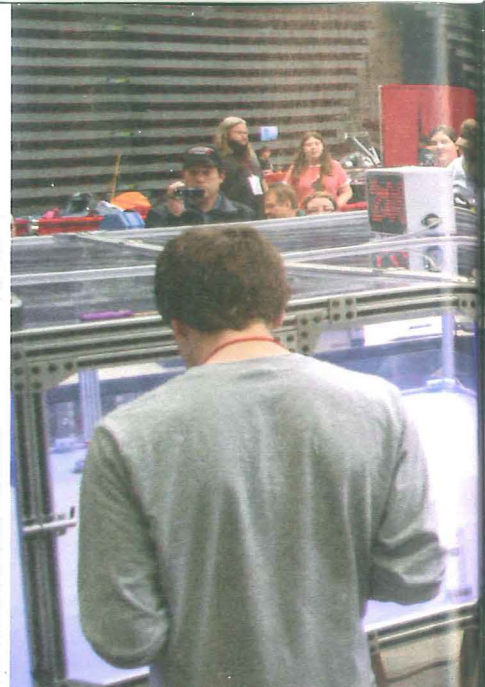
FRC Team 4213 Metal Cow Robotics.



13TH ANNUAL BOT BRAWL



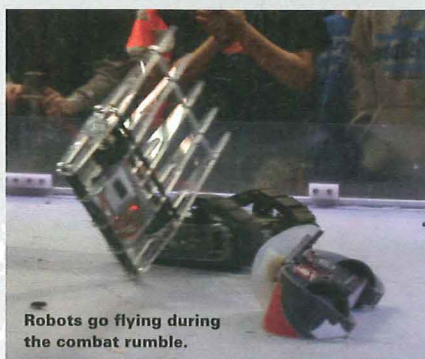
Club members Mike Dvorsky and Brian Oleson prepare their mini-sumo robots for the next match.



Antweight robot Firaga shows its battle scars.



Mini sumo bot Orthos scoops his opponent.

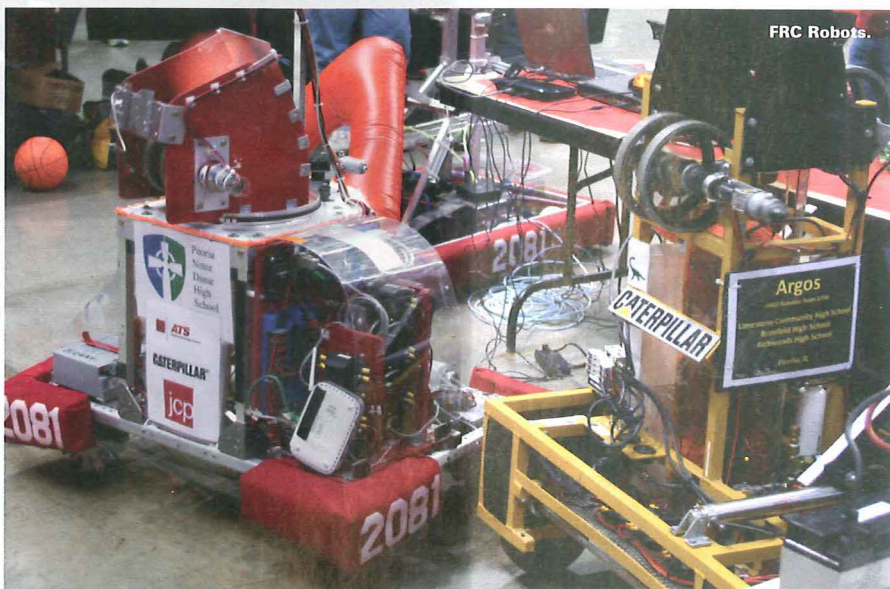


Robots go flying during the combat rumble.

prize donations. CIRC is very thankful to all of these companies and, especially, DSP Robotics, who provided a free copy of Flowstone for every first, second, and third place finisher; MaxBotix who provided an ultrasonic rangefinder prize package for every finisher; PROBOTIX, who donated a Fireball X90 CNC router, and Parallax, who donated several valuable robotics kits. These prizes are much appreciated by the competitors and could be a catalyst for newcomers to the hobby or an opportunity for experienced builders to move up to the next level.

The Central Illinois Robotics Club is a community group based out of Peoria, Illinois. Individuals of all ages and skill levels are welcome to join. The club holds monthly meetings, organizes several group projects throughout the year and hosts the annual Bot Brawl competition. For more information about CIRC visit www.circopeoria.org.

"The Family Science Day event was organized by the Illinois State University Center for Mathematics, Science, and Technology. For more information about ISU CEMaST visit <http://cemast.illinoisstate.edu/>" ©



FRC Robots.





There were large crowds all day eager to see the robot action.



FRC teams 1756 Team Argos and 2081 ICARUS.



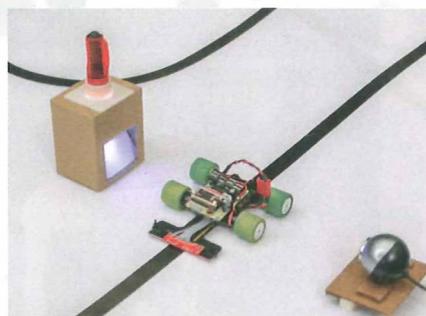
A solar powered car built by a team from Illinois State University.



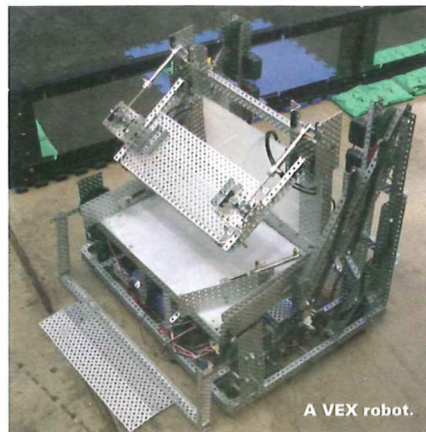
The spacious ISU RedBird Arena provided much more space than was available at previous Bot Brawls.



Clear Maze prepares to run the Line Maze course.



Custom vision based timer system for line-following competition.



A VEX robot.

WINNERS

1LB. Antweight Combat

- 1st - Guildenstern (Team Titan Tech Robotics)
- 2nd - Buzzsaw (Team Boirum)
- 3rd - Death by 1000 Cuts (Team Endgame)

3lb Beetleweight Combat

- 1st - Buzzkiller (Team Boirum)
- 2nd - Shoveover (Team Sunami)
- 3rd - Defibulator (Team SRC)

Line Following

- 1st - Low Down (dbots)
- 2nd - Not a Clue (N/A)
- 3rd - Clear Line (Oleson Robotics)

Line Maze

- 1st - Full Circle (dbots)
- 2nd - Clear Maze (Oleson Robotics)

Mini Sumo (500g)

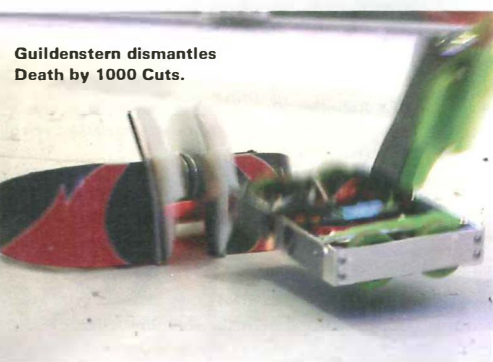
- 1st - Gizmo (University of Northern Iowa)
- 2nd - ExSpurt (Brooksbots)
- 3rd - Daaboh ((Black Bots)

Checkers on a Sumo Ring

- 1st - King Me (dbots)
- 2nd - VIP (dbots)

3Kg Sumo

- 1st - Executioner (Brooksbots)
- 2nd - Cheeky-san (dbots)
- 3rd - Brutus (dbots)



Guildenstern dismantles Death by 1000 Cuts.