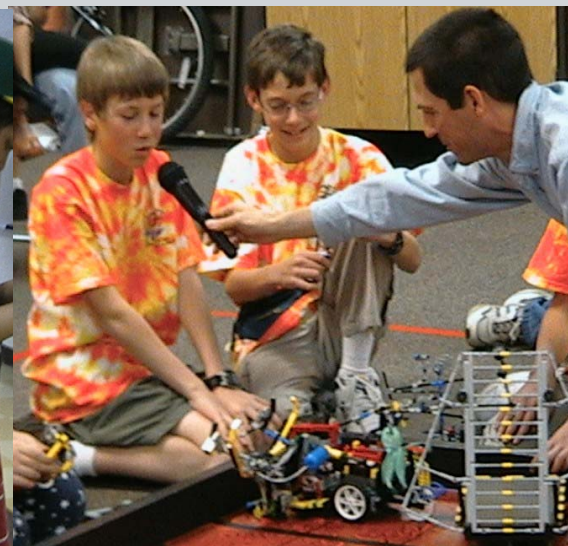
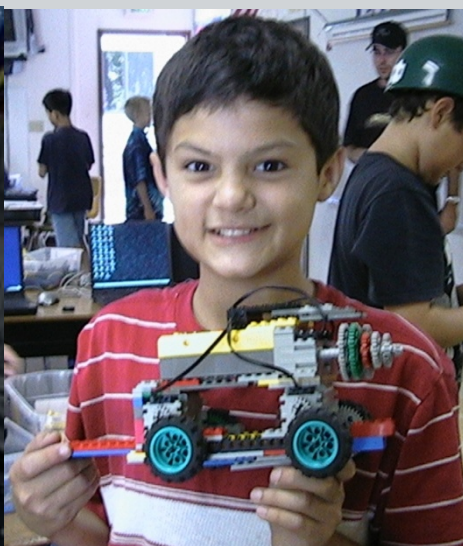




Los Altos Robotics
FIRST LEGO® League
2009 Season and Schedule



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FIRST LEGO® LEAGUE

Presented by
Los Altos Robotics

- Introduction To FIRST and FLL
- Los Altos Robotics Organization
- How To Participate
- How You Can Help
- Question & Answer
- End Meeting

Post-meeting: Q&A for potential coaches,
managers, and team organizers



FIRST Vision



"... to create a world where science and technology are celebrated..."

...where young people dream of becoming science and technology heroes..."

Dean Kamen, Founder and Visionary
FIRST Foundation

What is *FIRST* Foundation?

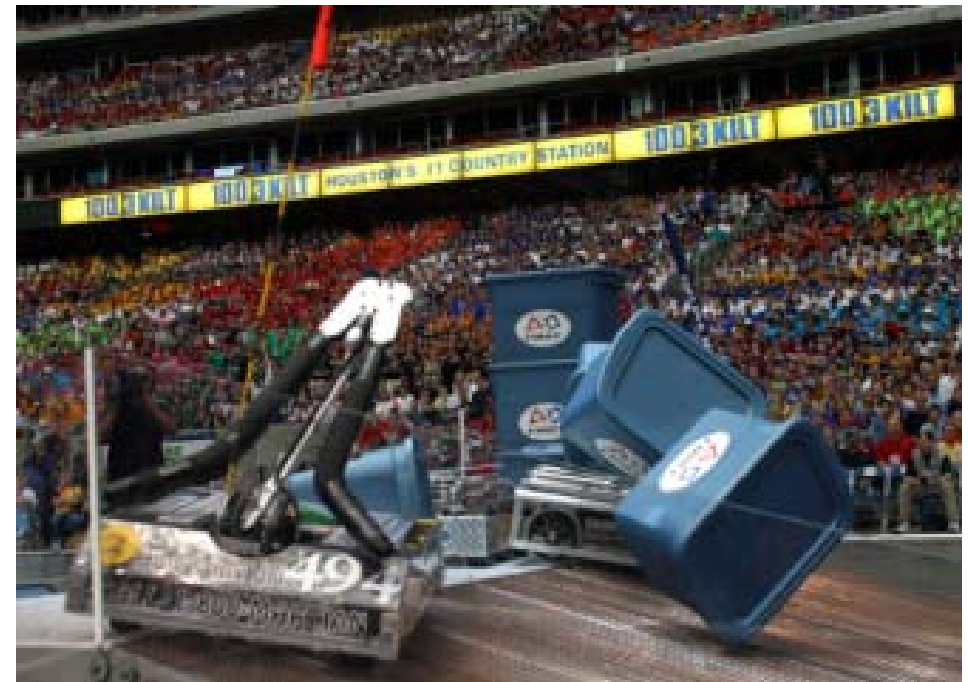
For **I**nspiration and **R**ecognition of **S**cience and **T**echnology



- Founded in 1989 by inventor Dean Kamen
- **FIRST Robotics Competition** for high-school-aged young people
- **FIRST LEGO League** for 9-14 year olds started in 1998
- **Other FIRST programs:** **FIRST Tech**, smaller scale robots for high school competitions, **FIRST Jr. FLL** for 6-8 year olds
- **Other programs:** **Botball** for jr/sr high school is run by KISS Institute for Practical Robotics

***FIRST* Robotics Competition for High School**

- Combines the excitement of sport with science and technology
- Basketball-court sized field with autonomous and radio-controlled robots
- High-school-aged young people discover the value of education in science, technology and engineering



What is FIRST LEGO League

TEAMS OF 4-8 STUDENTS, AGES 9-14

- Build autonomous robots to solve challenges on a table-top sized field in a time trial competition
- Research and demonstrate their ideas to a panel of judges

WHAT TYPE OF CHALLENGE?

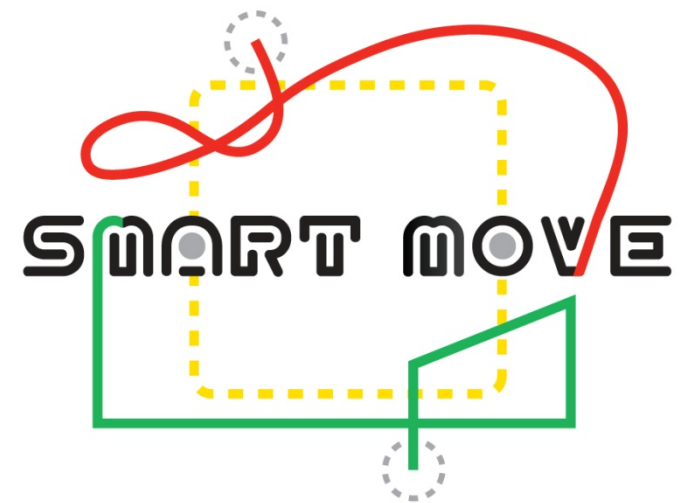
- An exciting and current technology or science
- A set of LEGO obstacles on an 4' x 8' field

HOW DOES IT WORK?

- 11 weeks to design, construct, program, and test solutions
- Use LEGO MINDSTORMS™ NXT or Robotics Invention Systems
- Compete with peers in high-energy tournaments with an emphasis on good sportsmanship.



Challenge 2009



Embark on an exploration of transportation in *FIRSTLEGO* League's 2009 Smart Move Challenge!

- Transform the way we access people places, goods, and services.
- Missions simulate tasks a robotic vehicle might have to complete
- Research projects investigate improvements in capability, safety, and efficiency of transportation.
- **KICK-OFF WAS SEPTEMBER 3rd** with a world-wide unveiling over the internet

Benefits of FIRST LEGO League

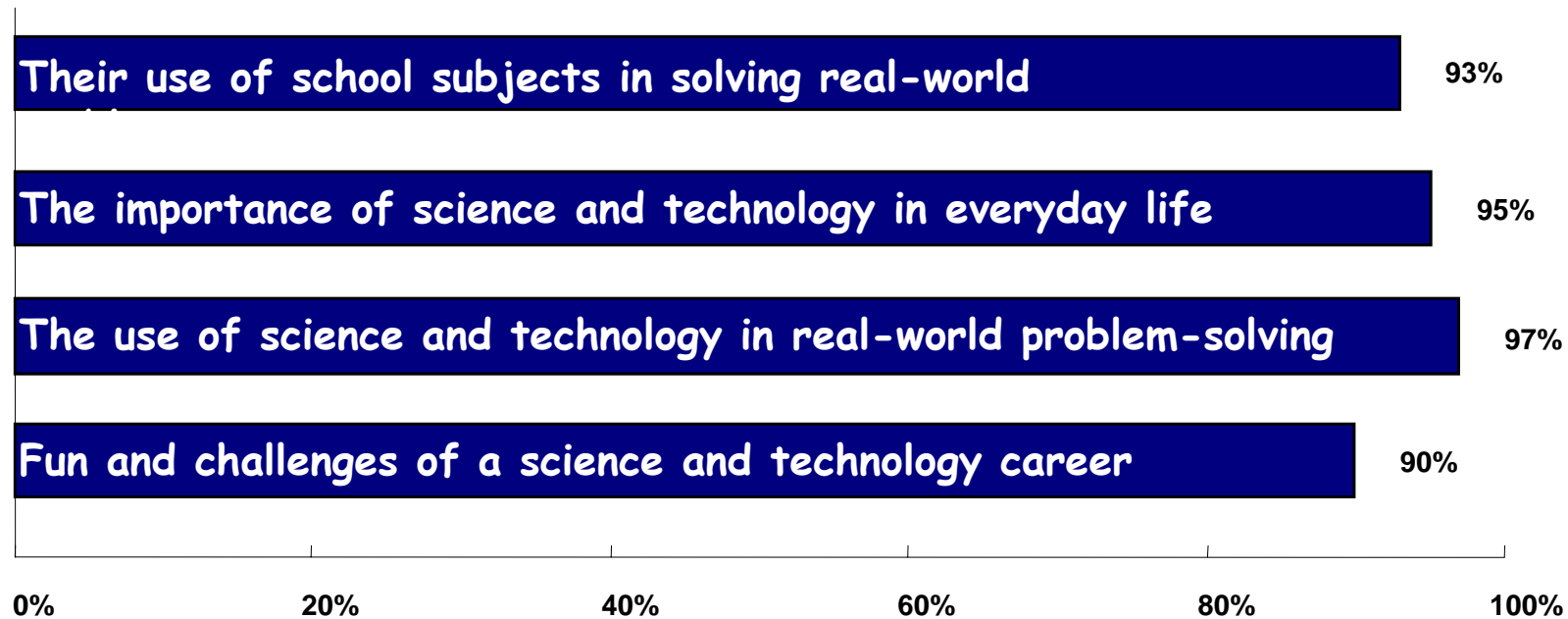
- Creates an environment where it is “cool” to get excited about science and technology
- Children have fun watching their own ideas in action, while building self-confidence, technical knowledge and life skills
- Creates a microcosm of working in a real-world design or engineering team



FLL Impact

In a 2004 evaluation of FLL, Brandeis University found that students

Increased knowledge of:



Source: FLL Program Study by Center for Youth and Communities, Brandeis University, May 2004

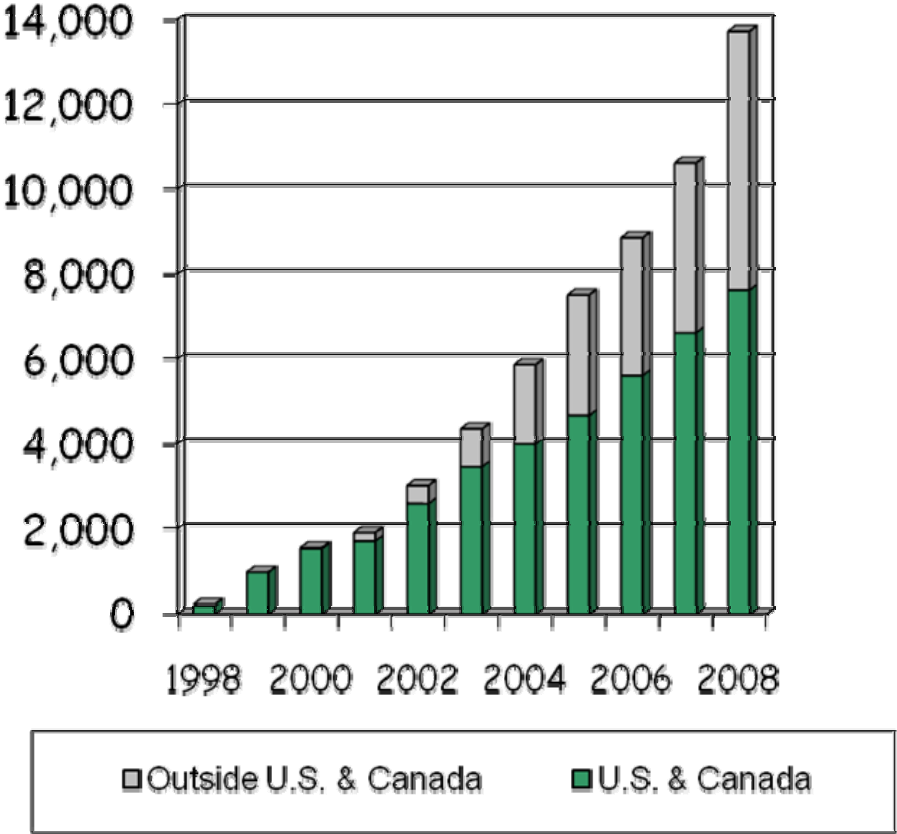


2008 Season Projections

- 13,705 teams (7700 U.S.)
- 137,050 middle-school students
- 42 countries

Australia	Greenland	Peru
Austria	Haiti (Pilot)	Poland
Belgium	Hungary	Portugal
Brazil	Iceland	Saudi Arabia
Canada	Ireland	Singapore
Chile	Israel	South Africa
China (Hong Kong)	Japan	South Korea
Colombia (Pilot)	Jordan	Spain
Czech Republic	Lithuania	Sweden
Denmark	Malaysia	Switzerland
Egypt	Mexico	Turkey
Faeroe Islands	Netherlands	United Arab Emirates
France	Norway	United Kingdom
Germany	Palestine	United States
- 454 qualifying events
- 89 tournaments

FLL Impact: Growth





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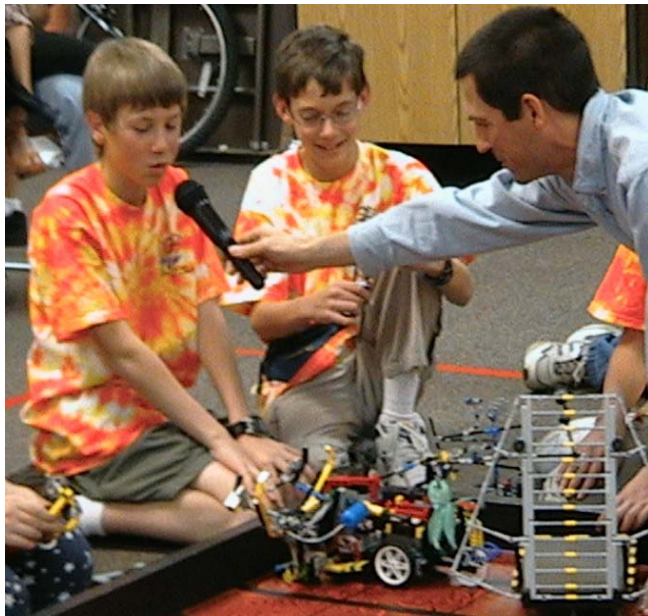
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What is Los Altos Robotics?

Los Altos Robotics is dedicated to providing the opportunity for our children to challenge themselves and experience the joy of building and programming robots

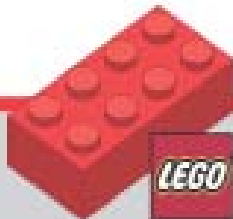


- Promote **First Lego League** in Los Altos area. There were 24 teams last year with over 140 players. High-scoring teams advanced to the Northern California tournament.
- Promote and organize **Botball teams**, a robotics activity directed at grades 7-12
- Support **FIRST Robotics** activities in Los Altos area high schools

Whom To Contact: Los Altos Robotics FLL Board

How to Contact: Get Email Addresses on Web Site

- Email / Inquiry Coordinator: Michael Schuh (michael@boardsailor.com)
- Team Registrar / Volunteers: Mike Murray (mike.murray@stanfordalumni.org)
- Playing Fields: Gordon Elder (fields@losaltosrobotics.org)
- Judging Coordinator: Sriram Chelluri
- Head Judge: Eitan Fenson
- Referee Coordinator: Ogen Perry
- Head Referee: **OPEN**
- Treasurer: Peter Tong
- Facilities: Finbar Crispie
- T-shirts: Diane Silverman
- PR/Advertising/Articles: Dave Lordemann and Ogen Perry
- Board Coordinators: Edmond Macaluso, April Liu





Los Altos Robotics FIRST Lego League 2009 Calendar

- Sep. 3 **FLL 2009 challenge unveiled on web**
- Sep 10 **Parent orientation**
- Sep 20 **Teams should be organized** (kits and challenge ordered by now)
www.firstlegoleague.org
- Sep - Nov **Challenge season** (11 week research, build, program, and test)
- Sun, Oct 25 **Los Altos Scrimmage** (Blach, noon - 5 pm)
- Sat, Nov. 21 **Los Altos Local Competition** (Blach, noon - 6 pm)
- Dec **South Bay Competitions** (Woodside, San Jose)
- Jan **Northern California State Tournament** (San Jose)





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Participation: How Are Teams Organized?

- Parents Are The Only Ones Who Organize Teams.
- Teams may be formed from: friends, schools, churches, youth organizations
- Parents post messages to **TigerBots Yahoo Group** to request teams/teammates
- LA Robotics DOES NOT organize teams or register players

WHAT PARENTS CAN DO TO ORGANIZE A TEAM

- Volunteer to be a coach or team manager
- Check with your child's friends to gauge interest level
- Teams generally work best with children at the same grade level
- Keep a copy of the Los Altos Robotics flyer with you and talk to teachers
- **TigerBots is a great place to ORGANIZE AN ALL-GIRLS TEAM**



What Are The Team Requirements?

- Up to 10 children (4-6 recommended), 4th grade to 14 years old
- At least one adult coach (we recommend a team manager too)
- For young teams (4th, 5th grade), at least one assistant coach

ORGANIZING STEPS

- Get team members, coaches, and manager
- Register team with National FLL ASAP (National FLL will send coaches manual, challenge set, field insert, and optionally, one FLL Robot kit)
- It is best to register and order kits by August 1 to get supplies in time
- Acquire additional robot kits (optional)
- Build a 4' by 8' field or request one from Los Altos Robotics (we have several)
- Join TigerBots email list: TigerBots-subscribe@yahoogroups.com in Los Altos Robotics tournament registration fees
- Send in Los Altos Robotics tournament registration fee



Resources for New Coaches

- **FLL Coaches' Handbook: All the information you need to get started**
 - Free with national FLL registration, has sections on:
 - Building a team
 - Equipment needed
 - Tournament rules and awards
 - Checklists and schedules
- **National FLL (www.firstlegoleague.org)**
 - Official game rules
 - Q&A forums
 - Conference calls with senior coaches



Resources for New Coaches (cont.)

- **Northern California FLL (www.ncafll.org)**
 - Online coaches' training
 - Live coaches' training, Sept. 26, Santa Clara
 - Tournament rules and awards
 - Checklists and schedules

- **Los Altos (TigerBots email list)**
 - Mentoring from veteran coaches and team members
 - Ideal for "How do I get started building a robot?" or "We're stuck" problems.
 - Helping new teams is part of the FLL ethic. Just ask!



How Much Does It Cost?

➤ Item	Team Cost	Player Cost (Team of 6)
➤ FLL Team Registration	\$200	\$33
➤ Field Challenge Set	\$65	\$11
➤ Robotics Kit (buy) (1 or 2 kits per team)	\$400 / \$800	\$67 / \$ 134
➤ LAR FLL T-shirt (optional)	\$96	\$16 (per shirt)
➤ LAR Tournament Fee	\$50	\$8
➤ LAR 4' x 8' board	\$40	\$7
➤ Misc expenses (project)	\$30	\$5
➤ Total	\$881 / \$1281	\$147 / \$214



Frequently Asked Questions

- When do you assign my child to a team? **We DO NOT** assign players to a team. Teams are formed by parents. Organize w/friends or TigerBots yahoo group.
- What are typical meeting times?
The coach sets meeting times with input from the team. Often there is a shorter meeting on a weekday and a longer meeting on the weekend.
- What is the time commitment for the children and parents?
Players: 4-6 hours per week (about the level of a recreational soccer team).
Coaches: Player meetings plus prep time.
- I don't know anything about robotics or programming. How can I help?
Team manager, assistant coach, or tournament volunteer.
- My 4th grader is 9 years old and the age range says 9-14, can he participate?
Some 4th graders are excited initially, but end out mostly playing with legos.
 - Do they like math, chess, or puzzles; or want to build or program games?
 - Can they stay reasonably focused in a team setting



5 Questions to Ask When Forming a Team

- Whose idea was this?
Parent or kid?
- What kind of experience are you looking for?
Great vacation or the job you love?
- How many other activities do the kids have? How important is FLL??
If doing well is important to the kids, they will need to spend more time
- What Mindstorms or Lego experience do the kids have?
Follow directions vs. building own creations?
- Who will be our team volunteer?
We need volunteers to help put on the tournament (e.g. venue setup, scorekeepers, and timekeepers) **Each team must provide a volunteer!**



Important Contact Information

- www.firstlegoleague.org
National FIRST organization. national registration, challenge and robot kits, challenge rules and announcements, coaches' training
- www.ncafll.org
Northern California FIRST organization, registration for local and regional tournaments
- www.losaltosrobotics.org, tigerBots-subscribe@yahoogroups.com
Los Altos scrimmage and tournament information
- Michael@boardsailor.com, 650-965-8037
Michael Schuh, Los Altos robotics team formation and management help
- Mike.Murray@stanfordalumni.org, 650-969-0919
Mike Murray, volunteer coordinator





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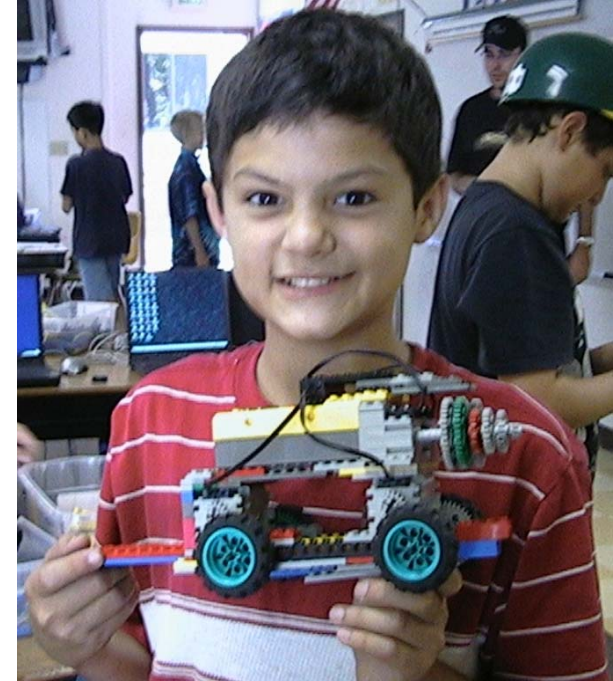
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How Parents Help

- **Coach a team**
- **Manager or assistant coach**
- **Tournament role - required for each team**

- **Join the Board Of Directors!**



"This is a great organization and wonderful for learning about Robotics. We've been involved with the program for two years and I would certainly encourage this as a school or extracurricular activity. "

-- **Dr. Sharon Moerner**, Blach Intermediate School

How Schools Help

Teachers and PTA

- Spread the word about FLL
 - School calendar
 - Frequent Flyer
 - School newsletter and web site
 - Jr High Science Teachers
 - Host an on-site demonstration (e.g. at science fair kick-off)
- Encourage parents to form teams

Administration

- Provide scrimmage and tournament venues!
- THANK YOU!!!
 - Leslie Crane (Blach Principal)
 - Tim Justus (LASD Superintendent)



How Supporters and High School Students Help:

Sponsors

- Make a donation to NCaFLL (see our web site)
- Sponsor Botball teams (see our web site)

High School Robotics

- Referee at the FLL tournament
- Demonstrate FIRST robots at the FLL tournament
- Mountain View Sparten Robotics and Los Altos Eagle Robotics have provided **OUTSTANDING** support at Los Altos FLL tournaments.





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