

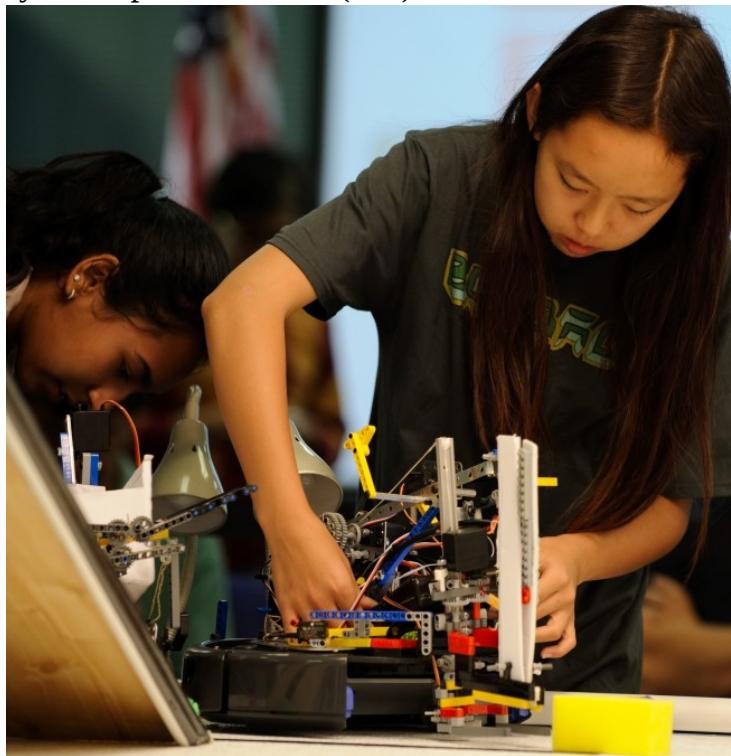
Los Altos Community Botball Team Announcement for 2019 Season

Michael Schuh

Summary

Botball is a robotics sports program that is made up of teams that use a robot controller, motors, switches, analog sensors, digital sensors, and LEGO pieces to construct a robot. The teams use their robots to compete against other teams in a game that takes place on an 8' x

8' playing field. The robots score points by moving and placing playing field objects into scoring positions. Through the last seventeen years, hundreds of students have benefited from the program, and the Los Altos Community Botball Teams have won many awards at the Northern California Botball Tournaments and the International Botball tournaments. For the 2019 season, we are looking for highly motivated and interested Junior High and High School students to join the teams. We also need parents to support the teams. For more information, contact me at Michael@Boardsailor.com or at my home phone number (650) 965-8037.



Botball Competition

The goal of the KISS Institute Botball program is to interest and excite high school and middle school students in the areas of science and engineering as they design, construct, and program autonomous robots. The Botball program gives teenagers a fun competitive environment where they learn engineering and programming skills through hands-on experience with robots. The Botball program has been around for many years with local area competitions. The next Botball Northern California Competition will be held on Saturday April 13 at NASA Ames Research Center. The challenge will be announced on Feb 2, 2019. More information about Botball can be found at www.botball.org and www.kipr.org.

Time Commitment

We have found that robot team participants often quickly grow to love the Botball robotics program and want to spend as much time on it as they can. Teams usually schedule five hours of meeting time a week, but we have learned that the most enthusiastic members will spend much more time working on the robots. This will of course be at the discretion of the team members. Teams will likely meet on Fridays after dinner and on Saturdays or Sundays. Typically, most parents spend most of their time with regards to the team transporting their children to and from the meetings and cheering them on at the competition. Some parents spend a lot more time as coaches and assistant coaches.

Pre-Season Meetings

We will be holding meetings before the competition is released to teach new members how to program and to bring returning members back up to speed. These meetings are important because we have found that once the challenge is released, most fundamental robotics learning stops and team members focus on building robots for the game. **It is very important that new team members attend all of the training meetings.**



Botball preseasn training meeting

Coaching Style

Michael organized the local Boball teams and was the head coach for the first eleven years. He developed a coaching style that has been embraced by other coaches and will likely be continued by this year's coaches. He thinks the team members benefit the most from the robotics programs if they do all the designing, building, and programming. He encourages them, stays out of the way, and as needed, requests that other parents do the same. He makes sure that all of the materials are available and that the team members understand the task. Then he steps back and helps only when needed. The teams that he has coached have had fun, learned a lot, and done well in competitions. The teams this year will be run by a team captain selected by the team members and coach. We will have several returning coaches this year and will recruit coaches for the other teams as needed.

Cost

The cost of a team is estimated to be \$2,800 of which \$2,500 is the team registration fee. We have some funds available from last year for registering the first team. Last year, we had a total of 81 team members for eight teams and spent \$250 per team member. This amount varies each year based on the number of team members per team and playing field expenses. I think the optimal size of a team is six



students and the maximum reasonable team size is eight to ten students. The main organization is the KISS Institute for Practical Robotics (KIPR). It is a public charity under IRS code 501(c)(3). All contributions to KIPR for the teams are tax deductible to the extent allowed by law and will defray the expenses for all the team members of the Los Altos Community Teams. Since donations are tax deductible and fees are not, we encourage all parents to make a tax deductible donation in the \$250 to \$325 range to cover the team registration. After we have received all of the donations, each team member will be responsible for their part of the remaining cost. Anyone who drops out by February 1 will have their donation returned to them. Any extra funds raised this season will be saved for use for the next year's team(s) and/or for helping team members attend the International Botball Competition. Botball qualifies for some company donation matching programs, so please consider this if one of these is available for you. Botball is not an educational institution so company donation matching programs that require the organization to be an educational institution will likely not work.

this is more than your family can afford, feel free to donate whatever amount you want or even skip a year until your conditions improve. I have noticed a correlation between donation amount and team member participation. There have been bigger donations from families where their child has spent a lot of time working on Botball and smaller donations from those less active. This works for me and makes a lot of sense. We organize Botball teams to benefit the kids and somehow all of the funding thankfully works out.

Meeting Place

Training meetings will take place at the NASA Ames Research Center located of highway 101 on Moffett Blvd. Four team member parents have volunteered to host the regular season team meetings for their child's team at their homes. We need more team meeting locations. The meeting place needs to have room for an 8' x 8' playing field and several laptop computers. If you are willing to host a team, please let me know. You don't have to coach to host a team.





Los Altos Community Botball teams, coaches, parents, and Botball staff at the 2018 Global Conference on Educational Robotics (GCER) competition held in Indian Wells, California.

Teams

Being on a team and learning how to be a good team member and a good team leader are some of the major benefits of the Botball program. Many team members form long lasting friendships with their team mates.

Once the application deadline has passed, the Los Altos Community Teams Board of Directors will meet and assign students to the teams. While they will try to keep friends together, five or more friends might be split onto two different teams. The talented returning team members are distributed amongst the teams. While we want experienced team members on each team, the team member talent and experience does not have to be equally distributed amongst the teams. It is OK to have younger teams with a two or so experienced team members and a team or two with a high concentration of long time Botball team members. High School juniors and seniors should not be put on a team filled with Jr. High students. We also do our best to avoid totally rookie teams made up of new and one year veterans. We try to place team members on teams which meet close to their homes whenever possible. Ideally, team members will be able to bike or walk to the meetings and attend the same school as their team mates. Coaches and hosts will be on the same team as their children.

To form teams with these objectives in mind, the team organizers work to organize teams with 6 to 8 team members by

- Starting with recruiting coaches and hosts
- Combining friends into groups independent of teams
- Putting these groups onto the geographically closest team
- Placing the rest of the prospective members onto the closest team
- Paying attention to allergies when placing team members

Hopefully we will have enough coaches and hosts so that we do not have to turn down any students if we have too many sign up to reasonably place all of them on teams.

Many people like the idea of having High School and Middle School teams for the summer GCER international competition in Norman, Oklahoma. It is OK for team leaders and team members change teams for the international competition. The proposed international competition team list is circulated for at least a week to provide time for team members to ask to be on a different team.

Schedule

January 10 from 7:30 pm until 9 pm	Informational Meeting for potential team members and their parents at Mountain View High School in room 525 .
December - January 11	Identify potential team members.
January 11	Applications due.
January 17	Notify applicants who are accepted.
February 1	Last day to drop and receive full refund. Must tell Michael before the 7 pm training meeting start time.
January 11 - Feb 1	Team training meetings from 7:00 PM until 9:30 PM at the NASA Ames Research Center, Building 152, to cover <ul style="list-style-type: none">• 1/11 – Programming the robots in KISS C• 1/18 – Servos, Variables, If, Else, and While• 1/25 – Programming, Functions, Libraries• 2/1 – Using the iCreate, more sensors, Drive Library, team meet-up
Feb 2-3	Botball training workshop – 3 new team members/team can go. Game announced on Feb 2.
Feb 2-April 12	Build, design, program, and prepare for the competition. Minimum of two weekly meetings will likely be Friday evenings and Saturday or Sunday afternoons.
April 13	Northern California Tournament at the NASA Ames Research Center
May 18	All team end of season pot-luck dinner in Los Altos area
July 7-11	International Competition Tournament in Norman, Oklahoma

Assistance is Needed

We currently have five teams registered for the 2019 Botball season. There will likely be enough interest to support seven or more teams so we need more coaches and meeting places. Four coaches from last year are not returning this year so we have a larger than usual need for coaches and hosts. Coaching and hosting teams is rewarding and fun. Contact Michael if you are willing to coach or host a team. We be putting on a coaches training session in January. New coaches and hosts are encouraged to attend the coaches training session.

Expectations/Rules

All team member participants are expected to help design, build, and program the robots. Team members can specialize or work on a variety of tasks. In order to be an effective team, members who are disruptive or disrespectful inside or outside of the team meetings will be warned and then removed from their team. The coach will have final say in who is accepted, removed or kept on the teams. The coaches have yet to remove a team member but reserve the right to do so if the need arises. Most of the team meetings are lots of fun with some great camaraderie.

Other Options for being on a Botball Team

If you want to be on a Botball team other than one of the Los Altos Community Teams or you didn't make our deadlines, you can find all of the information you need to form a team at [www.botball.org](#) or you can talk with us about it. If you missed the application deadline and are still interested, check with us to see if we have room for you.

How to Apply

Complete the [team](#) and [workshop](#) registration forms (also available at boardsailor.com/botball) and complete and sign the Application Information requested below and give it and your donation to Michael Schuh. The check will not be cashed until applicants are notified that they are on a team. Applicants can request their money back and remove their name from the list at any time before February 1. Please donate to "KISS Institute for Practical Robotics" in the \$250 to \$325 range to support the team. If this is more than you can contribute, please include a check for what you are able to contribute. Botball qualifies for some company donation matching programs, so please consider this if one of these is available for you. Botball is not an educational institution so company donation matching programs that require the organization to be an educational institution will likely not work.

Application Information

Name: _____

Grade: _____ Age: _____ School: _____

Phone number: _____

Parent's Name(s): _____

Check Amount (Made out to the **KISS Institute for Practical Robotics**): _____

Are you planning on asking for matching funds for your donation? (Yes/No): _____
If yes, please tell me your company's name _____

I have read the cost and expectations/rules sections of the announcement and understand that that the team coach makes all decisions as to who will be on a team and reserves the right to remove a member after one warning for unacceptable behavior.

_____ Student's Signature

_____ Parent's Signature

Mail your signed application form (this page is all that is needed) and check to Michael Schuh at 1630 Elmhurst Drive, Los Altos, CA 94024 or bring it to the January 10 informational meeting at Mountain View High School in room 525.

Be sure and also complete the [web form available here](#) and at <http://boardsailor.com/botball> .
The application is also available at <http://boardsailor.com/botball>

If we don't have enough coaches and meeting places, we will have to turn away applicants. Fortunately, we have not had to do this yet. If needed, the Los Altos Community Botball Teams Board of Directors will decide who is accepted or not.

Call (650) 965-8037 or email Michael@Boardsailor.com if you have any questions or need more information.