

From Parent Volunteer to a Passion for LEGO® Robotics

by Asha Seshan

FIRST LEGO® League is a global robotics competition for students between the ages of 9 and 16. Students build and program an autonomous LEGO® MINDSTORMS robot to complete different tasks on a table filled with LEGO® models. In addition, they complete a research project and display teamwork skills. These three aspects are called Robot Game, Project and Core Values. FIRST LEGO® League, along with MINDSTORMS, celebrated its 20th anniversary in 2018. Just in the last year, the program had over 38,000 teams. However, FIRST LEGO® League impacts far more than the children involved in it.



Cheering on other teams at a FIRST LEGO® League International Open, May 2015.

My involvement in FIRST LEGO® League began in 2010 as a parent looking for something interesting related to coding and engineering for my children. I was invited with my family to attend a state championship FIRST LEGO® League event at the National Engineering and Robotics Center (NREC). NREC, all by itself, is a source of much inspiration. It is the lab where CHIMP (CMU Highly Intelligent Mobile Platform) and autonomous cars in the DARPA Grand Challenge were born. Add to that, about 600 excited students solving challenges related to the human body and using LEGO® to solve these challenges. My children and I were hooked.

My children decided that FIRST LEGO® League and LEGO® robotics was something they wanted to try for themselves. Hence, in the fall of 2011, they inaugurated a team called, Not the Droids You Are Looking For, with me as their coach. I had little idea at the time about what it would involve, or that 8 years later, even without a team, I would be still involved in the program.

In my first year, I was learning along with my team. I soon learnt that being a coach in FIRST LEGO® League is more the role of a facilitator. It did not take long for my team to know more than I did. That was fine. I took a step back and let the children drive the team. They went on to win the Champion's award at an International Open in 2015 and then at the world

level in 2018. As I watched them progress year after year, and saw them take skills they learnt and did even more with them outside the competition environment, I realized the power of this program. It was more than just a competition. It had given them the direction they needed.



Part of the MINDSTORMS Expert Zone at WRO 2016 in New Delhi, India, November 2016.

FIRST LEGO® League is 100% volunteer driven. Without volunteers, your own team would have no event to go to. I began by volunteering to judge in 2012 at local events. As my children were invited to world-level events, I started meeting volunteers who were so passionate that they inspired me to do even more. Starting in 2015, I started volunteering to judge at international events. I judged at World Festival in St. Louis, Razorback Open in Arkansas, and Mountain State Invitational in West Virginia. This year, I will be volunteering at World Festival Detroit and will return to the Mountain State Invitational.



Asha with with co-judge from Brazil at World Festival 2015.

In 2015 my sons, who run EV3Lessons.com, challenged me to contribute something to their site. I decided that I could provide a coach's perspective. Coach's Corner was born. It was a way to capture tips for coaches. I regularly solicit articles from fellow coaches on topics ranging from fundraising to team facilitation. I also write several of the articles myself.



With Dutch FIRST LEGO® League Champions team in April 2018 in Detroit. The Dutch team gave me a T-shirt and adopted me as their honorary coach.

In 2017, my sons began a Facebook Group called FIRST LEGO® League: Share & Learn. The purpose was to create an online community for coaches to support each other. This

group has 4000 members now, and is the most active online community for FIRST LEGO® League that I know of. As with any online community, it needs some adult moderation. That's where I come in. I am the lead administrator for the group. Today, it is a vibrant community of coaches, volunteers, referees, and organizers. There are now four Share and Learn groups, one for each program in FIRST, all affiliated with each other.

As a result of my involvement with MINDSTORMS and FIRST LEGO® League, I was asked to join both the MINDSTORMS Community Partners (MCP) and the LEGO® Engineering Design Group Educators (EDGers) a few years ago. During my year collaborating with the EDGers, I created a series of articles called "Meet the Creator" about amazing LEGO® builders around the world who inspire students and educators and use LEGO® robotics as part of their curriculum. This series of articles was an enormous success and achieved its purpose. They can be seen on the LEGOEngineering.com website.

It is only natural to get involved in the activity that your children participate in. In my case, it was LEGO® MINDSTORMS and FIRST LEGO® League. Although my children have now retired from FIRST LEGO® League, I still play a part in running the Facebook Group and mentoring rookie coaches through the program. I would say that what started out as simply enabling my children's hobby turned into a passion – a passion to use LEGO® robotics to spread STEM, and help other children also be inspired and find their paths.

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With all the Ohio volunteers at FIRST LEGO® League moments after Sanjay and Arvind became World Champions, World Festival 2018.