2016
Ten years ago, a single student had a vision: to create the first FRC team in his city, Lod. So he created the Spikes. As our tenth anniversary approaches, we’re proud to say: We are Spikers - we are making a change. We’ve done many things over the past ten years: we started 1 FRC team, mentored 7, opened 9 FLL teams, all the while doing community work in an effort to spread science and technology alongside FIRST values and striven to always compete with a smile on our faces and Gracious Professionalism towards other teams.

Ten years have come and gone, and we still hold the same 3 core values. FIRST and

foremost, the upholding of Gracious Professionalism - any team in Israel can tell you we’re always there to help. Second, we make a point of helping those in our local community. Third, we’ve always been a team of the students, by the students, for the students; most of our work and decision making is done by us, which enables us to learn through experience. We believe this is the way to get the most out of FRC.

For example, the progress we’ve made in design and engineering. 10 years ago we used broomsticks and drilled holes to reduce weight. Now, we design the robot ourselves using CAD tools, have design reviews and ensure our robot is of professional quality.

Our decade of activity begins with our families and us: our teamwork is outstanding. Spikes are friends, close as family, and we even spend most of our free time together. Family is more than just a figure of speech: 20% of our members are siblings of 2212 alumni. ”I often call one member by his older sibling's name,” -Chaim Most, Woodie Flowers Award winning mentor.

Weekly newsletters help keep our families and sponsors informed and the more they are, the more they get involved with us. Many parents and family members join us as mentors, especially during the build season. In fact, 90% of our mentors are either family members or alumni.
Our sponsors are incredibly active in our work too. Our partnership with Motorola Solutions gives us the opportunity to see into the world of high-tech. We participate in their annual volunteer fair, and they’ve sent numerous mentors to us over the years. Our relationship with Nesher is not only financial: our ties have grown stronger over the years, resulting in their attending the three-day regional with us. In addition, we bring the spirit of FIRST to our sponsor ELAL Airlines. Through their monthly employee newsletter, many know about the Spikes and FRC.

Our alumni are an excellent example of how FIRST inspires us: 100% of them finish high school, and 85% of them work in the fields of science, serve in military technology units and study advanced STEM subjects in university.
But participating in 2212 gave them more than that: it gave them the motivation to fulfill FIRST’s vision. Looking back over the years, we can find that 20 of our alumni have mentored over 15 FIRST groups and many of them participate as staff in FIRST competitions. 3 of our alumni decided to take their it to a whole new level: they founded the MOST group: An organization created to raise the bar for FRC in Israel by introducing a new competition named Falafel and a Knowledge seminar.
Another project founded by a team alumni was FIOS, an online system for signing up new FLL groups and ordering parts “Without FIOS FIRST Israel would have a hard time reaching so many teams. FIOS is a godsend,” Keren Muchnik, FLL program coordinator. One of our alumni even works for FIRST!
We believe that it is thanks to the power of this core: family, sponsors, and alumni, that we were able to reach this ten year anniversary.

Our celebration continues as we get our school involved. This year 2212 participated in a school volunteer panel where #2212 local projects were detailed. Several non-FRC students were enthusiastic and joined our community projects. The administration is thankful that we ’ve participated in our school’s open day where we demonstrate our robots to the school (600 kids) and potential freshmen and their parents. Towards the end of the year, we hold an annual lecture on STEM subjects for all of the freshmen (over 150 kids). Although we study in a science-based school we try to show that STEM subjects go beyond homework and tests. Our vision is to make our dry classroom work into fun!

Our largest project is the 2212 Summer Workshop. For the past 8 years, we’ve held a week-long summer workshop for 9 & 10th graders (50 this year), where we teach how to plan, build & program a robot as well as community and marketing skills. The program is well established and has sparked interest in students becoming members. This year, we also hosted two rookie teams: 5961 and 2096. 2096 were billited in our homes for the week. “We barely knew them when they arrived at our doorstep, but now they’re a real part of our family,” -Amir deHaas.

The importance of helping the city of Lod has never faded over these past 10 years. Lod is not an easy city to live in. It is comprised of Jewish and Arab citizens and has a large number of various immigrants. Consequently, there are gaps both socially and economically. So a lot of thinking went into how the Spikes could promote STEM in Lod. In 2011, the Spikes opened and mentored the first 2 FLL groups. Since then, an additional 6 FLL teams have opened in Lod. When FIRST Israel asked us to host a Jr. FLL festival we were happy to do so and this year we’re thrilled to have opened our first Jr FLL in Lod. ”2212’s impact in Lod has been evident, and it was clearly one of our best festivals,” -Moran Shalev, Jr FLL Program coordinator

We refused to stop there: In 2013, we taught basic computer work at a nearby elderly home, and since 2014, we’ve operated STEM activities for kids at the Lod Purim festival

(over 2500 attendees!) every March.
For the last 3 years, we’ve operated a learning center for underprivileged children where we encourage a big brother/sister connection with the kids and help them with their studies. We brought FIRST to them by opening an FLL team and created a website for them.
Our school helps its students in need. This year 2212’s annual bowl-a-thon, the only one of its kind in Israel, raised 3600 NIS towards buying computers for two students. Last year, it allowed us to donate two computers to a Jewish-Arab Community Center. In short, our presence in Lod has become stronger over the years which is a source of pride. We have felt the support of Lod, by having articles written about us in local newspapers informing residents of what we strive for.

One of our milestones in our ten years as a group is our innovative Kinect project. In collaboration with Asaf HaRofe hospital, we have designed interactive games for the use in physiotherapy sessions for children. We programmed two games so far, and in our weekly sessions, they have been met with incredible success. Our ultimate goal is to expand this project nation-wide to as many children as possible, so the healing process will not be as difficult as it is.

Our 10 year anniversary wouldn’t be complete without mentioning our connection with FIRST & how it motivates our actions in the FIRST community. FIRST inspired us to open 9 FLL teams & mentor 13. They gave us the inspiration to mentor 7 FRC teams & help countless others, from Afula to Dimona. By mentoring so many teams it is clear that FIRST gave us the inspiration to turn Gracious Professionalism into one of our core values & always put it to work: FIRST even acknowledged our efforts by granting us the award 5 years.

FIRST also gave us the inspiration to try, for the first time, to start an FRC team- 5961 from Rehovot! In the 2015 regional, we met the Rehovot FLL mentor. We offered to help her start an FRC team. Members of our team helped her organize & register the team, and during the summer invited them to our workshops. In the Falafel Competition, they were our guests. Since then, we've had weekly visits & have invited them often to our workshop. Whenever they’ve needed our help, be it by borrowing equipment, raising funds, or helping with team management, we’ve always been there.

Additional actions include providing resources by publishing articles on building & programming in FIRST forums & translating official FLL & FRC documents to Hebrew in order to ensure that they’re accessible to everyone. In 2013, we started 2 FLL projects. We host an instruction course for FLL judges and we assemble FLL kits. This year we expanded our kit building session and invited other FRC teams to join us. We were pleased when teams 5961, 4590, 4661 & 2096 came. 16 kits were built - 72% of the total number of kits! This year we ran our second seminar for FLL mentors with the addition of lectures for Jr. FLL mentors. The seminar had an attendance of 40 mentors from all over the country and featured lectures by FIRST employees & professionals. “The Spikes did an amazing job with this seminar. They raised the level of FLL in Israel,” -Avi Ostfeld, FLL mentor.

In 2015, our captain gave a lecture on sponsorship at the Afeka seminar. This seminar is run by FIRST and is meant to enrich all FRC teams. This lecture was very well received and is now used as a resource for FRC teams. In addition, we’ve participated in 4 national conventions this year, where we demonstrated the robot & spread FIRST’s message.

It’s clear to us that the past 10 years wouldn’t have happened without FIRST. FIRST gives us the required tools to thrive in the STEM community. We feel that FIRST has opened doors for us that we never imagined going through which made us, in turn, open doors for other people. We’re the Spikes and we look forward to another ten years of celebrating science and technology!