ROBOLANCERS' ROUNDTABLE

Volume VIII - May 2014

This newsletter is dedicated to providing updates of what's going on to the sponsors of Central High School's robotics team, the RoboLancers [FRC Team #321; FTC Team #5320 and Team #6676].

WORDS TO THE WISE

By Daniel Ueda

Spring for the RoboLancers for the past couple of years has encompassed Spring Training. Spring Training was started last year by Alissa Sperling, a mentor with the team, and this year is being run by mentor Mary Conrad. The training includes all of the classes necessary for individuals to transition from FTC to FRC. They are taught by coaches, mentors, and seniors on the team and range from public speaking to tool safety.

In addition to Spring Training, spring equals fundraising time for the RoboLancers. We ran two big fundraisers during the month of May: Dorney Park ticket sales and the Applebee's Flapjack fundraiser. The Applebee's fundraiser was held on May 17 and raised about $600, and the Dorney Park ticket sales raised about $900. In addition, the team secured recurring sponsorship from Comcast ($3,000) and McKean Defense ($5,000) during May.

The next big step for the team is fundraising for expansion into their new space at Central High School. The team is ramping up our campaign to fund the new STEM Innovation Lab, a 3,000+ sq. ft. space that will include a computer science classroom, a machine shop, practice field space, and plenty of much needed storage. The fundraising goal for the project is $250,000. Please contact us if you are interested in getting behind this effort.

See you in the summer!

THE PHILLY ROBOTICS EXPO

By Thomas Davidenko, 275

On Friday, April 4, 2014, the RoboLancers hosted the Fourth Annual Philly Robotics Expo (PRX). This year, the expo was a part of Philly Tech Week. Every year we invite hundreds of Philadelphian students and teachers to experience STEM and robotics through exhibitors, speakers, and workshops.

This year, we hosted PRX at UPenn's Singh Nanotechnology Lab. The day before the event, we received a tour of UPenn. After the tour, we set up for the event. The Singh Nanotechnology Lab was so elegant and modern.

For this year's PRX, I was the Exhibitor Coordinator. This meant that I had to keep in touch with all the exhibitors, make sure they had everything they needed, and made sure they were enjoying their time at the Expo. In the beginning, my job was to take all the exhibitors to their tables. We had a table plan for all the exhibitors. Unfortunately for us, there was a giant statue in the Exhibitor Hall which could not be obstructed, so we quickly went back to the drawing board to find good locations for every exhibitor. Other than that, getting to meet all the exhibitors was very interesting. There were many FIRST teams who came to the Expo. In the end, we had our robot throwing the ball to Masterman's robot. Most of the kids crowded around our robots. I also talked to exhibitors who were Central alumni.

By the end of this year's PRX, all of the workshops were done and the exhibitors were packing up. I was helping clean up a workshop. Before we packed up the NXT robots we decided to have a battlebots competition with them. I had the strongest robot out of all the three people who were competing and used my manipulator to flip all the other robots. I hope all the other kids who attended the workshops had as much fun as I did with the NXT robots.

I'm very proud of how well PRX went this year. I hope we can improve next year's and reach out to more kids in the City with more workshops, speakers, and exhibitors.

IN THIS ISSUE

A GUIDE TO PRX FROM A GUIDE

By Mai Nguyen, 275

It's quiet, early in the morning, and no one is here but the team and other busy people who belonged in the building before we took temporary residence. We had spent just yesterday setting up from 3:30 pm to 11:30 pm, immediately after school and taking transit together, being given a tour around our event's host in order to do what were assigned or had volunteered to do: to show around our groups what the Philly Robotics Expo had to offer. It's only 7:00am in the morning and it's completely silent. Fast forward two hours: it starts off small with groups coming in early and suddenly, it's bustling and people are crowding at the front door as they get situated at the registration table. In the matter of just two hours, the lobby of the UPenn Singh building is filling up as booth tables are coming in and groups have arrived. How does this happen? What does it even all mean?

The RoboLancers have been hosting and organizing this event for four years now, and this year's event happened to be my second year participating as a member on the team. We set up via connections and organize together I was a guide again as I was last year, and to be honest, I personally am more inclined to guiding. The awkward hand motions of my excitement to introduce myself and briefly know my group for the rest of the day is much easier than to hope to expect to educate and pass on knowledge that may or may not retain in their minds. For this year, UPenn graciously allowed the RoboLancers to host the event of PRX on their campus. The campus was huge and easy to get lost on, and despite that we were only present in two buildings that were sort of across the street from each other, it was still crucial to someone of my role to be able to guide my group in between. Thankfully, we have competent people that organized the schedules to switching in between buildings after lunch. Depending wherever the group started, they got to experience workshops and presentations/talks in the morning and the afternoon. The classes were taught by my fellow RoboLancers, and the interesting presentations that were given by people who had an opportunity to present and share all of the cool robo-things that they do; the event gave me a realization of happiness that not the entirety of the generation was missing out on robotics and engineering.

We and several other FRC teams such as Vulcan Robotics had brought their robots in from the FRC season of 2014 to demonstrate--the amount of attention and observation from many of the kids that came to the expo was enraptured on them. However, despite the coolness of 120 lb. limited robots, there was also the FTC field that was set up in a large conference room three floors up from the lobby of presenters and FRC robots. Here, kids were taught by the FTC teams, RoboLancers' Crimson and Gold, to use the robots on the FTC game of 2014. Within the same lobby was also the FLL competition, where Lego people and EVO competitions took place for the younger age groups. As far as I had been guided and trained to guide, this were the opportunities of science and robotics of the Singh center's scheduled groups in the morning.

I think that one of the most beautiful things about the Philly Robotics Expo is the moment when one stops for a moment from the scurrying and class taking and walking, and takes a moment to absorb the entire scene. The silence is

completely filled up, and the chatter of excitement and servos whirring on robots accompanies the uniting of people. When the hallways echo as silence fights to maintain its original order, but the excitement paints the aura and all that one can really breathe is simply the existence alongside others. While poetic metaphors aren't really what robotics is, I believe in an inspiration in robotic cognizance, from robot to mind -- I hope that what the Philly Robotics Expo has sought out to do continues to inspire not only a future of the RoboLancers' team, but a future of generations to come: (S)cience, (T)echnology, (E)ducation, and (M)athematic inspiration.

LEADERSHIP SKILLS AND TEAM ELECTIONS

By Rob Mitchell IV, Junior

I believe that the best qualities of leaders I have observed include a few primary characteristics. No matter where, what, or whom you are leading, in order to be successful you need to have humility. Situations will often arise when something has to get done in a certain area where you may not have enough experience. If you are a humble person, you will understand this. Whether it's going to your supervisor for help or communicating with your peers who might know what to do, having a humble mentality will take you far wherever you go.

Number two is management. In school, the workforce and life in general, you are always going to have a lot on your plate. Being a leader should mean that you will have people to help you with those tasks. But in order to be successful, you will need to know everything that needs to be done, when it should be done, whom you need to do it, and in what order to complete said tasks; all in a timely fashion. If you have 100 people under your command or five, there is always a way to delegate the work successfully. The key is assessing your worker's skills and delegating them properly.

Number three is commitment. If you are selected for a leadership position, no matter how large or insignificant, you must have a deep rooted commitment to the organization you are working with. When you walk into those doors of the workspace, you have to keep the organization as your number one priority. Commitment will keep you from becoming distracted by personal issues with your co-workers. It all comes back around to gracious professionalism, something that should be practiced as much with your peers as in front of judges. If you put the team before your personal feelings, you will find yourself stepping out of your comfort zone and realizing the potential that so many others have seen in you.

These three skills will make any member of the team, no matter how knowledgeable or inexperienced you are, a potential leader. If you see these in others you work with, please encourage them to run for positions at the election this year. If you are planning on running for a leadership role already, then feel free to ask others how they see you, or what experiences they might have had with your leadership.

As someone who has been an Assistant Lead for the past two years, working with Steve Choe, the Electrical Lead, has been one of my best life experiences. Not only did he understand and respect the level of commitment and skill I strive to bring daily, asking for my input on decisions but he always made sure that I was comfortable with the decisions we made. Even if the decision was not what I may have wanted, he would always explain why he made those decisions and how going in another direction would help the team in the long run.

Congratulations to all of the RoboLancers' newly elected officers for 2014-2015: President-elect: Stanley Umeweni, 274; Vice President-elect: Thomas Davidenko, 275; Secretary-elect: Ariana Versace, 276; Treasurer-elect: Nadia Tran, 274; Mechanical Lead-elect: Kamal Carter, 274; Electrical Lead-elect: Maria Shayegan, 274; Programming Lead-elect: Armond Smith, 274; and Marketing Lead-elect: Brian Cheng, 274. It should be noted that Stanley and Kamal have been RoboLancers since freshman year and have put their full passion for STEM into their work.

NEW MEMBERS GROW UP!

By Henry Dang, 276

When I first joined in September, I was pretty irresponsible and always delayed everything that I did until the day before it was due. Unfortunately (and for good reason too), this didn't work in robotics. To be honest, robotics was extremely time-consuming and a tad stressful, but it was worth it. I met a ton of new people and they felt like family to me. When you're sitting with a certain set of people for six hours every week, friendships are bound to be made.

I've also learned how to work with others since robotics is a group project. But that wasn't all. When I went to the Philly Robotics Expo, I was at the FTC Field and talked to middle/high school students about how the game works and the idea behind it. It was not only fun, but it helped me become better at public speaking as well. It covered basically two birds with one stone.

This year, though, I've recently learned that Mr. Ueda, who runs the robotics club, will be leaving Central High School. I haven't gotten to know him too well, since he was always busy checking our financial status, finding sponsors, applying for grants, helping the team, starting fundraisers, preparing for events, and keeping everyone organized. Without Mr. Ueda, there'll most likely be some changes, either for better or for worse. The team will definitely need to adapt to those change, but overall, I'm optimistic for whatever lies ahead next year.

By Justin Luu, 276

It was scary jumping into a club with no knowledge of where it would lead me. Since then, I would say it changed my life. Seriously. As part of marketing, we don't handle the wiring, construction, or coding. We handle proofreading this very Roundtable, affairs outside the team, and help with the robot indirectly. I would say I learned a lot doing these things. I've done speeches in which I tell people what we do, our outreach, our family. It made me become a more confident person and less afraid to speak up.

I've seen people join, leave, and join again. Most of the people at the beginning of the year I forgot were even part of robotics, but I'm still here.

This first year with the team, I met some of the nicest and most supportive seniors. I am sad to see them go, but I am glad for the experience and knowledge they provided when I joined this club. I'm not sure if it's a club, but a team, or even a family. The people who stayed till the end of the year created a long-lasting bond together as we hosted events, fought for victory, and the hardships of people leaving.

Our coach, Mr. Ueda will be leaving at the end of this year, and we will have a new coach in his place. I believe I truly joined the team when an age is ending, and a new era is starting, so to say. It will be hard saying goodbye to these people who welcomed new cadets into our team with open arms, and harder still to know that we will one day be in their shoes.

By Jade Tso, 276

I walked into the auditorium with a crowd of people. It is the first robotics meeting of the school year. Before the meeting starts, a group of upperclassmen who are the older members of the RoboLancers were on the stage working together to prepare for this first meeting. At that moment, I really want to become one of them and become a part of this group….

This was how I felt in the beginning of the year. Meeting after meeting, I felt more and more part of this big family. We work together as a team to construct a robot that belongs to all of us. When we hit an obstacle, we can ask our mentors to guide us through our trouble. Besides learning technical skills for robotics, I have learned many other things that I consider to be very valuable skills in life such as time management, gracious professionalism and teamwork.

I have learned so much from the team and I am beyond grateful for everything that the team has done for me, especially to the coaches and mentors of the team. Robotics has been a huge component of my freshmen year at Central and it will continue to be a part of my high school career.

By Ariana Versace, 276

Starting my freshman year at Central as a RoboLancer has definitely taken its toll on me in many, many ways. Nothing but great, wonderful things has come out of this. The friends I have made. The memories I have. Everything compiled together has made me a RoboLancer for which I could not be more thankful.

Growing up on this team, I have made a ton of friends, many of whom are seniors which kind of upsets me that I'll only know them for the remainder of this year. I would have never gotten to know other freshmen on the team the way I do if it weren't for robotics. Coming in in September I didn't know the slightest thing about engineering. I barely knew how to hold a wrench, but now here I am going through Spring Training to be on FRC next year!

The effects that the RoboLancers have made on my life are so extraordinary, I can't even begin to explain them all. Before joining the robotics team, I had previously thought I wanted to pursue a career in the culinary arts. Going through one year on FTC has broadened my horizons, and there's something about engineering and mechanics that makes me feel that's where I belong. My introduction to FIRST has given me the push that I need to help pave my way into a future job and I could not be happier because of that.

With two new coaches, a lot of things are going to change next year. I still have high hopes and expectations for this team. There is not a doubt in my mind that we shall strive to continue to be the best we can be, if not better. Adapting might be a bit challenging at first but I feel as though this could be what we need to know when it is time to calm down with the jokes and procrastination and actually salvage our time well enough to have an A+ robot next season.

By Tribe Vongola Zoldyck, 276

This year for me was a year of FIRST. It was my first year in high school, and my first year on a robotics team, which competes in FIRST competitions. Coming to a new school, I didn't know many people and was having a hard time finding friends and people with common interest. Then I joined the RoboLancers. I had fun learning how to make robots and the different skills needed. But the most fun and surprising part of robotics was meeting new people. Normally, the stereotype of people who are on the robotics team are nerd, anti-social people who aren't any fun to be around. Nothing could be further than the truth. The first meeting for robotics I attended was although informative, fun with lots of jokes being cracked. From there, the ball just kept rolling. As I got to know more and more people on the team, I began making friends and having people to sit with and talk to during lunch.

The best part of robotics was not only making friends and joining an adopted family but growing together as a team. The trials and tribulations of robotics helped us form close bonds and allowed us to discover ourselves as well as others. As part of the team 5320, I can say the road to states was a learning-experience. Long days were spent fixing the notebook and creating the hanging device for our robot, while we tried to cope with the unexpected problems that occur such as materials breaking and even having our robot vandalized. Through these complications, I got closer to everyone on the team. It seemed like even when the chips were down, we were still having fun while finding ways to cope with our problems. By the end of the season, what Mr. Ueda said in the beginning of the year about becoming a family turned out to be true. I could depend on anybody on the team to come through for me when times were tough.

My favorite memory in robotics is when we hosted the robotics competition at our own high school, Central. It was stressful not only because we had to set up and clean up but because our robot stopped working right before the competition and we lost three matches in a row. Our fate of going to States was hanging on a thread. We banded together and after a lot of hard work and trial and error our robot was working and we started winning matches again. This was great but the best part was when our whole team including FRC started cheering for our robot. The energy was amazing and you could feel it pulsating throughout the gym as our team came together. Eventually when won our last matches and we just made it to States.

Unfortunately when we went to States, we didn't do too well and lost almost all of our matches. But what was great about States was we had so much fun that losing almost didn't matter. While being part of Central's RoboLancers is at times stressful and hectic, I had a lot of fun, made friends and, frankly, wouldn't have it any other way.

SALUTE TO SENIORS!

Steven Choe

I remember when I first joined the team. It was my freshman year. There is much intimidation when it comes to being a new member, at least for me anyway. I was a bit discouraged and thought I wouldn't fit in ... but I was wrong. I quickly became adjusted to an atmosphere full of humorous, bright, and mature individuals. I got to work with the older members for a little while until they all graduated. I missed them, and I still do, but in the end they influenced and changed me into who I am today. With the experienced members gone, I was nervous about whether me and the newer members were competent enough to follow their example. I can assure you that we are, and we've only continued to progress and grow as a team. Not only in terms of how we mature and develop as responsible people, but we continue to push boundaries of what we're capable of and what we've achieved that we never thought possible.

Our outreach in the City of Philadelphia is second to none. We have hosted an expo for four years, started a numerous amount of FTC teams, have petitioned against city-wide school budget cuts, and made it to the 2013 FRC World Championship because of our community involvement. Although I've mostly worked on building and designing robots, outreach is definitely one of the key components of why we exist. We pride ourselves on our work, having both a personal and professional sense of duty, standards, and achievement. One of the interesting aspects of being on this team, is that you never know what opportunities will appear. In none of my four years has there ever been a dull moment, nor have I ever thought we could accomplish what we could.

Going into my junior year, it became one of my most stressful years on the team. If being an inexperienced electrical lead and having to balance school work wasn't enough, in early October 2012, I sustained a heel fracture and for some time could not attend school. I was very upset throughout much of the year; being physically incapacitated, unable to go to important robotics events, and not being able to skateboard. Back then, robotics and skateboarding were my two greatest passions and they still are. I missed both dearly. Later on in the summer of 2013, we faced the dreary effects of city-wide school budget cuts. I was scared that we wouldn't be able to have a team the following year, which I just couldn't imagine. We frantically wrote letters to City Council & Governor Corbett, proposed a platform for saving schools and robotics programs on a collective level, and even participated in a rally alongside the Philadelphia Federation of Teachers. Many jobs were lost, good workers were laid off and forced to look elsewhere, and we almost lost our head coach, not to mention the entire team. Reflecting on it now, we've been able to handle the situation quite successfully as the year went on. But it does not mean we have won the war yet. Those two events were quite possibly the most significant experiences during my time on the team, and reminded me why I love my job on the team and all the people who are a part of it.

Now, many of you have heard the recent news that our head coach, Daniel Ueda, is leaving his job as a teacher, mentor, and robotics coach at Central High School to move onto a very significant role at UPenn. I do wish him the best of luck, but I also want to say that I'm very grateful for every single minute he spent throughout the day in school, or at home nonstop to devoting his life to make the whole team's experience a lot more enjoyable. Whether it had to do with making sure we had sponsors, standing by our policies of remaining a student-run organization, or to make sure we were able to attend competitions, he was truly like another father you could depend on. He looked out for you if you had anything you wanted to talk about. I even felt like this year was the year I bonded with him the most. Having to balance his time with teaching an extra class, all while juggling with managing the team and other important duties, he deserves more than Geek of the Year Award. He deserves a nice, warm hug. It's been a very stressful year for him, but he persevered. We're all going to miss him, but we'll know that he's not too far away and he'll always have a place on this team. I would also like to thank George for his hard work which has always been consistent during my time spent in robotics. This guy will just about laugh at anything and is also very laid back. He would often drop some wisdom if he felt something could be done better or had to change for the better. Whether it was videography or helping to design robots, George was there to help. He's always been determined to get something done, so I know he'll do wonders with his new job in California. May the force and McDonald's continue to be with you, George.

To wrap this whole article up, it has definitely allowed me to reflect a bit. I know a great deal more than I thought I ever thought I would being on a team such as this one. As our most fundamental principle on this team is to learn, I hope that I was able to teach people a thing or two whether it came down to robotics or not. Even though I'm graduating, this does not mean I'm leaving my family. As time passes, I will help out as much as I can because this team has given back to me something so profound that can't go unappreciated. So, thank you to Daniel Ueda, Mama Conrad, Mr. Pignetti, George, 270, 271, 272, and everyone else who made my time on the team extra special. You guys will only continue to do great things. It was an honor to serve as your team's electrical lead.

Maris Doherty

When I was seven I tried to invent a flying bicycle using a Barbie bike and some wire. When I was sixteen I joined the RoboLancers. Now going on eighteen, I am going to be a mechanical engineering major.

The RoboLancers have been a major part of my life since joining junior year. In fact, I think I've spent more time at robotics than I have sleeping. I've stayed after school till the lights have all shut off and only one exit was left unlocked, I've spent snow days with my hand stuck inside a robot (word to the wise—never put pneumatics where you can't reach them or worse where they'll overheat, you will regret it), I've spent weekends and Friday nights—and every other night for that matter—working on the robot. But it's given me much more than something to do after school. It's given me experience, connections, and knowledge that I doubt I could get from any other club.

The RoboLancers have also had a significant impact on my future. It was through robotics that I was connected with Lavner Camps where I will be a robotics instructor/counselor this summer. Plus, I'd be lying if I said it didn't come up several times in my college applications (and job interview and resume and SAT essay). And while I will be going to school at the University of California San Diego (goodbye Philly, hello La Jolla!), I know I will be back to mentor whenever I can—after all, the mentors have always made robotics a great place to be.

While I'm sad to go, I'm happy I was able to be a part of the RoboLancers. I am happy to have had a chance to make new friends, work with our wonderful mentors and assistant coach, and to learn so much about engineering.

Andrei Dorin

This is my senior year at Central High School and now with June coming up fast, it is a time to look back and reflect on my time in high school. Some of my best experiences were with the RoboLancers in our many adventures. While FRC was definitely a fun experience, my best memories come from my first year in FTC. This was when I would stay until 6-7 pm in school with my friends, Armond and Mike, eating popcorn chicken, drinking soda, and building a robot. We were all new to the team and that was a time when new friendships were made as we bonded over something we all love doing, building robots.

My personal advice for new members would be to stay on top of things. As a team, we are very skilled at what we do but we lack organization and time management. We are usually behind schedule, so getting things done on time would be a great skill for all of us to learn. Another piece of advice would be to stay committed. I too should have followed this advice, and I if I had second chance, I would totally try this again. It is a real challenge balancing school, robotics and a social life, and I would often find myself skipping out on robotics. If I had a second chance, I definitely would have stuck with it for longer than I did this year and would've helped the team out a lot more.

As I move on to college, I plan on pursuing the same field as I have in robotics. Beginning in the fall, I will be a full-time Drexel student, majoring in computer science. This is what I've always been passionate about and what I've always been the best at. Just because I'm moving forward doesn't mean I won't look back. My jacket will always be a companion of mine to remind me of the excellent team I was part of and to remind me of some of my best times at Central. What I will miss the most about the team is the people in it. I will always remember the people I met on the team, which I worked with for so long and have been through so much with. I would also like to take this time to thank Mr. Ueda and Mrs. Conrad for making this team possible and making my last two years of high school so much better.

Grant Fisher

Moving forward, I will be going to Drexel University for product design but as long as I am able, I will come back to mentor those who I leave behind. Hopefully I will be able to instill some of the same lessons I learned from my predecessors. I am not one to live in regret, but one that I have is that I never took enough initiative as a younger member, preferring to take the safer road and let others lead. Hopefully, that is something I rectified in my last few months. That is also my advice to younger members; people are often too absorbed in their own interests to consider anyone else's unless you make them.

I could go on a tirade about how being on the RoboLancers has changed my life and given me a door into the world of STEM education or how going to the world championships was an experience that I will cherish and remember for the rest of my life, but I imagine that my esteemed peers could do that far more eloquently than I. What I personally took from the RoboLancers is not something tangible; it is not something that can be expressed in any single action or in any event in which I partook. My memories of things like worlds will stand out as some of the best, but the memories I hold most dear are of the calm moments, those sparkling shards of time when the roaring of power tools and the shouting of voices trying to overcome them fused together in a harmony of chaos, times when we strolled along the balance point of exhaustion and determination that drowned out any external woes. But also the still points; riding home in silence because we were too tired to speak, watching the scenery go by. It was those moments that I always felt the most at peace.

Jesse Holzman

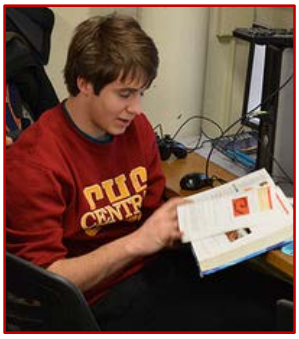
It's hard to believe that my final year on the team, and high school altogether, is coming to a rapid close. If could go back and choose the most prime years of my long life to relive, I would, without a doubt, choose my time on the RoboLancers. My only regret and biggest mistake was not joining until my junior year. I'm pretty sure the amount of valuable life lessons and experiences I've taken from this team

are unparalleled among anyone else's high school experience. Like, what kind of football player can say that he can reticulate splines?! Not any that I know, that's for sure.

Being a part of this team has provided me with innumerable amounts of memories that I will cherish for the rest of my life. The most prominent of which, though, would have to be competing in St. Louis. A week spent in close proximity with the same group of people, I thought would be a living nightmare by the end, especially being kicked off by a 16 hour bus ride. To my wonderful surprise, though, that week was a jambalaya of radical experiences that could never be reproduced. Not to mention spending so much time around our coach, Dan "The Cranberry Man" Ueda. That guy is a stud.

All in all, I would like to thank every member, mentor, coach, sponsor, supporter, and fangirl for making my final days worth everything.

Etienne Jacquot



The theme of this whole year is that the RoboLancers create change.

When I sat down to really start the Chairman's Essay, I made a list of everything the team has done over the past five years. It was a long Google doc, needless to say, but I categorized everything based on the change it aimed to make.

From there, I tried to put in words how the team creates change. It's difficult to measure change, so for a lot of the essay I talked about the impact we have. There is a difference between impact and change though. What you do can mean something, but does it make a difference?

It then came down to the last few days before the essay was due, so I cut school and stayed home to write it. I organized the essay based on the different levels of change, from within the team, to Central, to Philadelphia, to beyond the city. I worked for probably 9 hours straight, and by the time I finished, it had actually turned into something I was proud of. It was nowhere near done and we edited it like crazy, but I thought I was able to get down in writing what the team really is about.

We didn't win Chairman's, and I cried about it in the stands. Everyone around me felt bad, and they reminded me that losing doesn't take anything away from what we do. I blamed myself for a while after, and more than anything I just wanted an answer as to why we lost.

Now that time has passed and the end of high school is coming a little faster than I want, I've been thinking back and reflecting on my four years at Central. The person I was in the beginning of junior year is completely different than the person I am today, and it's now I realized that I have known the answer as to why we lost all along.

In the essay I kind of missed out on the most important level, which is how the RoboLancers change on a personal level. We can build all the robots we want and try and reach out into every community, but in the end of the day there are 60 students at Central High School that can make a difference by putting a smile on someone's face, whether it's the eight year old at the science festival who asked me if "science was magic?" or me while I write my last article for the Roundtable.

Being a RoboLancer has made all the difference for me, and that's the only answer I ever needed. I could not be who I am today, a kid going to Drexel for Computer Engineering who hopes that no matter what he does, it will not only mean something but it will make a difference. I am so grateful that I could on this team, and I thank everyone that created the change in me.

Finnegan Kallmyer

How does one say goodbye to a team like the RoboLancers?

I remember wanting to join robotics during my sophomore year but regrettably did not. I wish I had because during my two years I have had an amazing time and I have made friends that I'll always remember. I'll never forget how accepting the team is of individuals and how family like the team is. In fact, it is a family.

My most memorable experience as part of the RoboLancers isn't really one experience. Throughout the two years I have been a part of the team there have been many memorable experiences. One of them is getting to go to participate in the FIRST World Championship. During that time I got to see top FRC robots in action performing unbelievably. I'll never forget seeing the faces of five to sixty year olds light up as they walked past the pits and watched the arenas. More recently a great experience was when we got called to join an alliance during FRC districts. Our entire team shot up out of our seats in pure excitement and feeling of accomplishment. In many ways robotics has motivated me to pursue a career dealing with engineering.

Without Mr. Ueda, Mrs. Conrad, and Mary Conrad the team wouldn't be where it is today. So, I thank all three of you and my team members for providing me with an amazing experience. It is because of my involvement in the team I will be studying to become a Mechanical Engineer at the University of Delaware.

One piece of advice I would give a future member is, don't stay quiet. If you really want to be a part of the team and create something remarkable then voice your opinions and take advantage of every opportunity to learn something new. This is something I wish I had done more. Whether it is electrical, mechanical, programming, or marketing, there is always something to do.

So, how does one say goodbye to all of this? I guess we don't have to though. Despite leaving for college we will always be a part of the RoboLancers.

Melissa Mejia

Wow! Even now that the year is coming to an end, I still cannot grasp the concept that this year's seniors will be moving onto college and will be leaving the RoboLancers behind.

Looking back at my time with the team, I cannot specifically pinpoint a significant moment that stood out to me the most. In fact, it was the smaller insignificant moments here and there that made the RoboLancers special and made me want to return every day. The ecstatic expression someone get when something finally works; the late nights spent working on the robot; the long, anticipating and joyful car rides to competitions -- moments like these helped me realize that the stress that may come with build season or the schoolwork load are worth putting up with.

Some words of wisdom I would like to pass on to future RoboLancers is to remember to have fun. Above all, you are in a club and are meant to enjoy yourself. Please try not to stress over small things. Stay happy.

PS: Senior year is not the easiest year, they lied.

Vincent LoneWolf Mills

It's slightly weird to be a senior in his first year in robotics. Some may say that it's even contradictory, but it's better late than never.

I actually didn't hear of robotics until late junior year. When the Central robotics team went to the world championship, it was the first time I heard of it. Sure, there's a whole area for robotics awards, but I didn't pay attention to it nor did I try to find out more information; however, when the team went to St. Louis, I actually considered that maybe this team wasn't just one of those clubs in Central with only five people in it. So, I put it in my mind to consider what it was about in senior year.

The decision of joining senior year was, to me, one of the best decisions I've ever made in high school. On the first introductory meeting in robotics, I was actually surprised to see how many people showed up. In fact, robotics has been the largest club I've seen. Over 120 people, most being freshmen, came to that introduction meeting. I don't even see sports teams with that many people! I was amazed at this. It was even intimidating, but I wouldn't let numbers discourage me so.

After the first meeting, I went to the next few meetings. There, I learned more of what robotics was about. I learned about the balance of teamwork between mechanical, electrical, programming, and marketing in the team. I learned about gracious professionalism. I even learned that we had three different teams and that FIRST, FRC, and FTC were acronyms for something other than "Frankford Transportation Center." I was intrigued, but I still wasn't convinced at that point. I was willing to help out with programming, but I still wasn't sure if robotics was right for me.

That was, until Duel on the Delaware.

Duel on the Delaware was literally the thing that sold me. Sure, I paid more attention to the FTC field or being a mascot, but I was surprised and impressed at the amount of dedication and teamwork that I actually fully grew interested in robotics. I also was slightly envious at Smokin' Motors and their awesome-looking robot and it boosted my drive to want to learn programming.

After Duel on the Delaware, I was convinced that I wanted to become a part of the team. I didn't know how much I would be able to do with only one year, but it was still worth a shot. I taught myself RobotC and prepared myself for what would be one of the greatest things I have ever done. I continuously programmed 5320's robot BEFORE it was even finished. I had to wait so long that I had to make a smaller practice chassis to make sure everything worked correctly. I was SO bored that I either helped 6676 with their programming needs or played video games until the robot was finished.

When the chassis for the robot was finally done for Ramp Riot, I basically told everyone that I didn't care how the robot is built as long as it's built sensibly and it's feasible both mechanically and via programming. Ramp Riot was also the place where I put my programming to the test. I tested out many autonomous, dead-reckoning programs and adjusted as needed; however, I did it in such speed and precision that it amazed even me. I actually managed to get the robot to do what it needed before the first actual match. Funny things occurred on that day with autonomous, but it worked.

Time passed and eventually everyone on the programming team learned RobotC to some extent. In addition, I saw that numbers dwindled quickly, too. My programming team went from about 18 people to about 8.5 (I thought of someone as a half of a part of the team because they only arrived only once in a while), so it was easier to keep track of whom I needed to talk to. Now, that number lowered to just me, Michael, Alex, Tribe, and XYZ, and, together, we all contributed greatly to the team. Michael and I mainly worked on the main code and debugging. Alex tested the robot. XYZ was the main contributor to the engineering notebook other than me. Tribe was either the comic relief character or

the person who fetched the materials. It was a petty job, but he liked it.

Looking back at the year, I can say that I learned quite a few things by being a RoboLancer. First off, I learned that programming was actually fun and a really cool thing to do. Now, I'm actually considering majoring in computer science at Drexel. Additionally, robotics taught me to pull my weight when working in groups and to be kind and interactive with others, even if they're not on my team. Gracious professionalism goes a long way. Because of it, I've made various friends around the city, with most of them being from Central and the Philadelphia High School for Girls. Robotics has really been beneficial to me in many ways and I appreciate that.

Now, on to the last thing ... There has been one person who has stood by me throughout my entire year in robotics: Mr. Ueda. In fact, he's been there since day one. Whenever I need help thinking of ideas for programming the robot, he was the one to talk to. Whenever I was having slight trouble timing dead reckoning, he suggested learning how to use sensors, something that was rewarding to learn. Whenever I felt like quitting the robotics community, he re-motivated me both directly and indirectly. I will never forget his funny yet satisfying statement about me. "Thank goodness Vincent's a freshman! We'll have him for three more years!" Yes, he was wrong and it was hilarious, but deep inside, it made me smile and felt wanted in the community. So again, I thank you, Ueda, and all of the RoboLancers. You made my senior year one worth remembering.

Michael Nguyen

When I decided to joined the team, I was a junior and did not expect much from joining the team. It was not until much later that I realized that I was a part of something bigger than I originally thought. I joined the team with very little to give back. I barely had any useful skills and definitely didn't have the imagination to utilize them. As time passed by, I eventually picked up many useful skills and found direction.

I started out on FTC like every new member. It was an interesting adventure. We spent months building a piece of junk (literally). Of course we didn't waste time, but on occasions we would play Yu-Gi-Oh! and Super Hexagon. We never really had a mentor that helped us. On a night before competition, Armond, Andrei (the two aka Armondrei), and I stayed late afterschool finishing up the last mechanism. We thought we hit a breakthrough when we were able to raise our robot's arm; however, that excitement was shot down as we started to see smoking motors. The next day, the entire Crimson team worked together to undo months of work to just have a really basic robot. We did well during our matches until we let Mike Davis take the wheel (none of us really had any time to practice driving). He drove the robot right into the opposing team's rings and gave our team penalties, losing us the match. Anytime that someone does something like that we usually say "he pulled a Mike Davis." After that, I was entrusted to be Crimson's designated driver. We eventually got to the State Championships and had a taste of how FRC was going to be. FTC was a great training ground for what was to come later.

When the FRC season came around, I originally didn't plan to be on the FRC team. I was going to ditch robots for tennis, but I was offered the opportunity to be the honorary driver for the team because of my "excellent driving skills" with the Crimson robot. I was really excited to drive the FRC robot, so I gladly accepted the position! I actually had no idea what I signed up for. I didn't even get to practice driving the robot until we got to competition (Our team is excellent at time management). There's not much to say about Chestnut Hill and Lenape, considering that the robot barely worked. Regardless of our robot's performance, competition is always the best part about being on the team! It's always a nerve-racking experience at the Driver's Station. It's like playing the lottery, you never know what you'll get. Sometimes the robot works, other times it doesn't. It's often the latter. For some odd reason we usually win the matches that our robot doesn't work. I actually always feel like I letting down the team when we lose a match, but when we win matches I'm like "Oh yeah that was all me."

Although our team doesn't build awesome robots, we do a good job at building the future through PRX and other outreach programs. How else would we have won the Engineering Inspiration Award three times!? (aka our ticket to Worlds). Worlds was an amazing experience, but I've might've talked about in another article or blog post.

Worlds was great, but my favorite competition was this year at Lenape. It was history in the making! When our team was picked by 225 for Eliminations at Lenape, everyone on the team went wild! The mentor from 225 told us how were doing a great job playing our role as an in-bounder. It's not every day that you get a compliment from a good team. That first elimination match was the best match I had driven in until we were cheated out of a win.

If I had the chance to do something over, I wouldn't take it (I lied I wished we won those elimination matches against Masterman). I probably wouldn't have the experiences I have now if I changed something. Sure there were bumps in the road this year, but it taught us that we had to do better next year. One thing I learned by being on this team is by taking the easy way out, we limit ourselves. People at the beginning of the year said that we weren't capable of building a shooter and when you look at the robot right now, what do we have?

Robotics has been a big influence for me. Being on the team has led me to pursue a Mechanical Engineering major. To fulfill that desire, I'll be going to school at Brigham Young University in Provo, Utah. Although it's far away from Philly, I'll come back to visit the team! (I say that but no guarantees) I'll probably find some sort of robotics related thing out there. I might volunteer to mentor another FIRST team or even start a VEX U robotics team when I'm at college. Regardless of what I do, I will always support the RoboLancers.

I'm going to miss being a part of this team. And what I mean by that is: I'm going to miss the jokes, laughter, the popcorn chicken, fries, the Pokémon matches, the Photoshopped images of people on the team, the cancerous air in 30, trying to find things in 30, the random cuts on my hands, the late nights spent afterschool, the low grades on my report card, the nosebleeds at competition, spending days off due to snow at Mr. Ueda's house to "finish" the robot, skipping class to work on the robot, watching YouTube videos instead of doing work, being called Mike Nugget, and chillen with the team. It means a lot to be a member of the RoboLancers. As this chapter of my life closes, hopefully a similar one opens.

Christian Perez

Because of the time that I have spent with this team, I take so much pride in that fact to the point where I identify myself as a member of the RoboLancers over being a member of Central High School. Every senior on the team who joined as a junior says they wished they joined earlier. I personally am happy I joined when I did. I feel as though joining as a junior, just like most of the other seniors on the team, was an intelligent decision. My reasoning for that is because being a RoboLancer can be very draining, and having experienced the rush of FRC only twice is actually a healthy dosage. Some seniors on the team who have been a part of the team for four years can sometimes be visibly drained completely of everything because of experiencing the very stressful six weeks of build season four times.

Throughout my time as a RoboLancer I have experienced many things. Some of these experiences may not have been the best but others were exciting beyond measure. As I move on to higher education at Drexel University on the road to becoming a civil engineer, I pray that my memories of my time with this team never fade. I remember last year after we completed build season and our team won the Engineering Inspiration Award not once but twice at both of our regional competitions, Springside-Chestnut Hill and Lenape, we hoped to make it to World Championships by winning Engineering Inspiration at Mid-Atlantic Robotics Championship. The moments of anticipation during the awards ceremony were excruciatingly exciting. We clasped hands together with excitement, and during the announcement of the Engineering Inspiration Award we jumped for joy when we learned we won it. It was an exciting time with everyone hugging each other and smiling ear to ear. It is a time I never will forget.

Being part of the team for only two years has done a lot of great things for me. One thing in particular is it has shown me the major and career that I will pursue in my future, which I mentioned before as being civil engineering. It actually happened in my first year when I still believed I wished to be an architect but decided I wanted to also be an engineer as a result of what I found being with the team. After trying to decide whether I should major in architecture and minor in engineering or vice versa, I approached my coach one day and asked if there was a way to combine the two ideas and he mentioned that civil engineering was the way to combine both aspects in my future. However, even with all of the positive impact the team has given me, there are things that I regret not doing. Most of those things that I wish I had done were closer to the end of this second year on the team. I would like to offer to the future members of the team that they take initiative and fight for things that they believe they can do. No matter what it is that someone on the team does, they should always make an attempt to show their skills. Because without an application there is no need for the skill, right?

Callan Powell

It's hard to think of this as a goodbye to the RoboLancers when I plan to help out with or mentor the team next year, but as this school year comes to a close it becomes increasingly difficult to part with my experiences as a team member.

I will no longer be spending hours into the night every weekday of build season with everyone, becoming less and less coherent as time passes. No longer will I be coming home covered in plastic dust or metal shavings and with various drill bits, nuts and bolts in my pockets - I once even made it home with a dremel blade. The time where I carry around various robot materials in my bag due to competitions has (hopefully) come to an end (there is such a thing as too much surgical tubing).

To all the remaining members on the team: Don't forget that this is your robot as well as your team. You have to work hard for it to succeed. Also don't forget that it's okay to make mistakes, but do not wallow in self-pity or become overly frustrated in the moment. Learn from what you do as well as what others have done, and turn that into an objective; remember to grow, because that is why our team exists.

In hindsight, my only real regret was that I didn't join freshman year. I still berate myself for not taking the opportunity sooner. Even so, I'll be leaving with more knowledge, wisdom and friends than I knew I could have from a "club" (It's definitely more than a club, I don't know why other people still refer to it as one). Although I'll be coming back in the future, I'll miss the family I found in the RoboLancers as a team member.

Zhenying Wu

It is my senior year at Central High School, which also marks my last year as a RoboLancers student member. I joined robotics when I was a freshman and this year marks the fourth year I've been involved with the team. Through these four years, I've gone through many positive changes. I was very much an introvert when I first joined the team. After these years spent with some wonderful people, I can say that I am much less introverted than I was four years ago. I've also developed leadership and communication skills and of course, programming knowledge.

Being one of the earlier members on the team, I can leave one piece of advice for current and future members. Always ask questions, we never expect you to have any prior knowledge of anything. Robotics is a learning experience, it definitely was for me. If you do not have a task assigned, ask around to see what you can help with. If you don't understand something, ask someone that does understand. If you just sit around and chit chat or play games, you won't achieve much. To be able to obtain knowledge, you must be proactive and willing to learn.

I've made many incredible memories through these years but I have to say that the most memorable is attending the 2013 FIRST World Championship with the team. I don't think I will ever forget about those few days spent at St. Louis. The most memorable thing from that trip would be the bus ride and of course the championship itself. To get to and from St. Louis, we had to endure a 15+ hour bus ride (twice!). Those hours on the bus were the most wonderful and agonizing hours ever. Being at worlds was really inspiring. I never realized that so many people, from all over the world, also share the same interests as me. I had so much fun meeting all the international teams and also seeing some amazing robots in action.

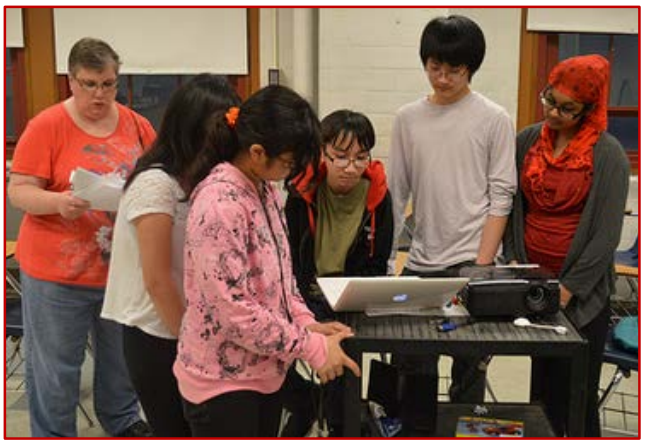
Robotics has really given me many wonderful opportunities. It was because of my involvement with robotics that got me selected as a winner of a woman in computing award. It was also because of robotics that allowed me to have a chance at obtaining the Liberty Scholarship for Drexel University (there's sort of this "tradition" on the team where the programming leads would always get this scholarship). After high school, I will be studying computer engineering at Drexel University.

As the school year comes to an end, my time as a student member of the RoboLancers is also coming to an end. I have spent an incredible four years as a member of the team and along the way, have gained immense knowledge and valuable skillsets. During these four years, I can say that I have definitely spent more time in school and at robotics events than at home. However, all those days spent waking up in the wee hours of the morning and going home late at night were all worth it. If I were to experience my four years of high school over again, I wouldn't change a thing. I would love to come back as a mentor for the team or maybe even volunteer at future robotics events.

SPRING TRAINING

By Christian Perez, 273

Beginning after the 2013 FRC season, the RoboLancers, with the help of Alissa Sperling, created RoboLancers University. RoboLancers University, or Spring Training as it is better known, is a series of classes taught by current FRC members and mentors along with our coaches to help the current FTC members understand FIRST better and increase their knowledge on all aspects of the team. The classes are split into two tracks which are Business and Engineering. Within those two tracks, the students take classes that are based around their tracks. This being said, engineering focuses on mechanical, electrical, programming, and other aspects which relate to the robot itself. The business track focuses more on marketing, fundraising, outreach and other things that relate to the team being active in the community. Those who wish to take part in FRC the following season and are not already a part of FRC must pass RoboLancers University. A great feature about this is that those who are teaching classes, seniors or those already on FRC, are free to take these classes in order to deepen their knowledge about a different subgroup of the team where there is an interest or for future reference. All in all, the experience is great for all of the members and at the end of all the classes, we hold what is called a "Mandatory Optional Fun Day" where all of the members gather and play games. Usually, we play dodge ball or Frisbee. It doesn't really matter because after all of the hard work we all put in during build season and Spring Training, we all could use a nice day to just relax and feel just a bit younger.



A BRIEF HISTORY OF THE ROBOLANCERS

Co-authored by Katherine Conrad, Daniel Ueda, and Rob Mitchell IV, Junior

Central High School's RoboLancers have been in operation since 1999 when the robotics team was founded by Dr. Joe O'Donnell as Team #321 under the FIRST Robotics Competition. The team began as a joint effort between Central and Martin Luther King High School, but then separated after one year. During that first year, Dr. O'Donnell passed the team on to Mr. John McMillian, who coached until 2003 when the team's third coach Ms. Kelly Norris, took over. Up to and including this year (2014), the RoboLancers continued their involvement with FIRST, adding their participation in BEST (Boosting Science, Engineering, and Technology) robotics in 2006. Ms. Norris also began teaching a robotics class at Central in 2007.

In 2004, the RoboLancers participated in the FIRST World Championships which were held at the Georgia Dome in Atlanta, GA.

In 2008, Mr. Daniel Ueda came on board as a new physics teacher at Central High School and joined the RoboLancers and Ms. Norris as an Assistant Coach. In June 2010, Ms. Norris departed Central High School, and starting in September 2010, Mr. Ueda was the sole coach.

The School District of Philadelphia's Secondary Robotics Initiative (SRI) funded robotics programs through 2009, leading to a total of approximately 60 robotics teams in the City of Philadelphia. Since the dissolution of SRI, the School District has reallocated STEM funding across the board, essentially eliminating its robotics programs per se.

The 2010-2011 year saw the team win many awards and attend the Best World Championship in Orlando, FL, that spring. Not to be outdone, Mr. Ueda's robotics class made it to the MATE World Championship, which was held in Houston, TX, in June 2011. That year also saw the inaugural Philly Robotics Expo, which was held at Drexel University.

In 2010, Joan Spain, the wife of Bernard Spain, 198, funded the renovation of two rooms to create a robotics lab for the RoboLancers.

The 2011-2012 year continued to see growth in the RoboLancers. The team grew to about 40 students. Additional parental involvement with the team came into being when Mrs. Katherine Conrad, a parent who for the prior two years had helped with the team and robot transportation, joined Mr. Ueda as an Assistant Coach. That year saw the RoboLancers compete exclusively under FIRST, and the team added FIRST Tech Challenge (FTC) Team #5320 for the first time.

2012-2013 was the beginning of enormous growth and change in the RoboLancers. Initially, 126 students signed up for membership in the team; however, the team leveled off at an average of about 75 steady members. In addition to Mrs. Conrad, three other parents became involved with the team, Donato Pignetti, an electrical mentor; Joe Kallas, a mechanical mentor; and Anita Quain, the meal coordinator. That year, the team began to follow a formal governance structure. A second FTC Team #6676 was started.

FRC Team #321 won four Engineering Inspiration Awards (one in 2012 at the FRC Springside/Chestnut Hill District Tournament, one in 2013 again at the FRC Springside/Chestnut Hill District Tournament and also at the FRC Seneca High School District Tournament, followed by one at the FRC MAR Regional Championship). The RoboLancers, FRC Team #321, traveled to the FIRST World Championships in April 2013.

The FTC teams also saw success in 2013. Both of the RoboLancers' FTC teams, Gold Team #5320 and Crimson Team #6676, qualified for the FTC State Championship held at Millersville University, and the Gold Team won the Connect Award, a high honor in the FTC competition.

In February 2013, the RoboLancers published its first newsletter called the RoboLancers' Roundtable in an effort to reach out to sponsors and donors to show gratitude and inclusion as part of the RoboLancers' family. Since then, the Roundtable is published four to six times per year.

During 2012-2013, filmmaker, Fiona Otway began following the RoboLancers during robotics meetings and events in which they participated, throughout build season and competitions, all the way to the FIRST World Championships during the production of her documentary, "The Sum of Its Parts," which was screened to all of those who contributed to it in March 2014.

The growth of the team again continued to soar in 2013-2014 with 140 students submitting applications for membership. Membership fluctuated throughout the season, averaging about 85 to 90 students. For the first time, the team engaged in two off-season events, Duel on the Delaware at Salem Community College in Carney's Point, NJ, and hosted by FRC Team MOE, and Ramp Riot, hosted by Wissahickon High School's FRC Team #341, Miss Daisy, in Ambler, PA.

In 2014, at the Final FTC Philadelphia Meet, Gold Team #5320 won the Rockwell Collins Innovate Award and Crimson Team #6676 won the PTC Design Award. Both FTC teams advanced to the State Championship held at Millersville University.

In 2014, FRC Team #321 won the Judges Award at the FRC Springside/Chestnut Hill District Tournament.

The Fourth Annual Philly Robotics Expo (PRX) changed venue in 2014 and was held at the Singh Nanotechnology Center at the University of Pennsylvania.

Over the last six years, RoboLancers' alumni have consistently returned to act as mentors to the team. Some of the former Central student-mentors are: Scott Cristella, 267, George Huynh, 267, Jared Kornfeld, 267, Rina Sor, 268, Chris Bamberski, 269, Kevin Mai, 270, Mary Conrad, 270, Meghan Ho, 271, Carlton Taylor, 271, Jordan Ramos, 271, Malik Blassingale, 271, Eric Lam, 271, Steven Duong, 272, Justin Nachea, 272, Anthony Curran, 272, Daniel Conrad, 272, Ben Ehrlich, 272, Johnson Kan, 272, and Island Huyhn, 272.

The 2014-2015 robotics season will see much change as beloved Head Coach, Mr. Daniel Ueda, is departing Central High School in June to take a position at the University of Pennsylvania as the Associate Director of Education and Outreach of the GRASP Lab. A new physics and robotics teacher, Mr. Michael Johnson, will join the RoboLancers' coaching staff, joining Ms. Darcel Bonner, Central's Science Department Chair (who has agreed to coach the team during this transition period) and Mrs. Conrad (who has agreed to continue to coach the team for the 2014-2015 season).

RoboLancers' Awards

2006: Philadelphia BEST:

- 1st Place – Robot Performance
- 3rd Place - Overall Award

2007: Philadelphia BEST:

- 1st Place – Robot Performance

2009: Philadelphia BEST:

- 1st Place – Robot Performance
- 2nd Place – Overall Award
- 2nd Place – Engineering Notebook
- 2nd Place – Marketing Presentation
- 1st Place – CAD Design

2010: Philadelphia MATE:

- 2nd Place – Engineering Notebook, Most Promising Team Award

2010: Philadelphia BEST:

- 1st Place – Robot Performance
- 2nd Place – Overall Award
- 3rd Place – Spirit and Sportsmanship Award
- 1st Place – CAD Design

2010: South Regional Championship BEST:

- 2nd Place – Marketing Presentation
- 6th Place – Overall Award [Qualified for National Competition]
- 6th Place – Engineering Notebook

2011: BEST National Championship, Orlando, FL:

- 3rd Place – Engineering Notebook
- 2nd Place – Team Video

2011: Philadelphia MATE:

- 2nd Place – Overall Award (Qualified for International Competition)
- 1st Place – Technical Report
- 1st Place – Table Display

2011: MATE International Competition, Houston, TX

- 1st Place – Spirit Award

2012: FTC Central Pennsylvania Qualifying Tournament

- Motivate Award

2012: FTC Philadelphia City Qualifying Tournament

- 3rd Place - Gold Team #5320: Inspire Award

2012: FTC Central Pennsylvania Qualifying Tournament

- Motivate Award

2012: FRC Springside/Chestnut Hill District Tournament

- Engineering Inspiration Award

2013: Pennsylvania FTC Championship Tournament:

- Connect Award

2013: FRC Springside/Chestnut Hill District Tournament:

- Engineering Inspiration Award

2013: FRC Seneca High School District Tournament:

- Engineering Inspiration Award

2013: FRC MAR Regional Championship:

- Engineering Inspiration Award

2014: Final FTC Philadelphia Meet:

- Rockwell Collins Innovate Award: Gold Team #5320
- PTC Design Award: Crimson Team #6676

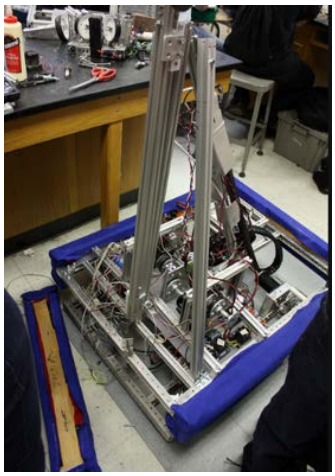
2014: FRC Springside/Chestnut Hill District Tournament:

- Judge's Award

The RoboLancers' FRC Robots

Year: 2010
Game: Breakaway

Year: 2011
Game: Logo Motion



Year: 2012
Game: Rebound Rumble

Year: 2013
Game: Ultimate Ascent

Year: 2014
Game: Aerial Assist

SPONSORSHIP

If you want to sponsor an award-winning Philadelphia public high school robotics team, please consider becoming a sponsor of the RoboLancers.

Your sponsorship provides a connection with students who will be tomorrow's leaders in STEM (science, technology, engineering and mathematics) fields. Would you please help? In addition to financial support, the team always is in need of tools, materials, software, hardware, and services (e.g., printing, copying, t-shirt production, advertising). If you are unable to provide financial support, we always are in need of team mentors. Please contact the RoboLancers for more information about these important aspects of giving. The following levels of sponsorship* currently are available:

Sponsorship Reward Levels	Bronze (Under $500)	Silver ($500-$999)	Gold ($1,000-$2,499)	Platinum ($2,500-$4,999)	Diamond ($5,000- Plus)	Premier
RoboLancers' recognition, along with thank you letter and current year subscription to RoboLancers' Roundtable						**THIS IS THE ROBOLANCERS' HIGHEST AND MOST UNIQUE LEVEL OF SPONSORSHIP. SPONSORS AT THIS LEVEL HAVE MADE A CONTRIBUTION TO THE ROBOLANCERS WHICH SURPASSES A DOLLAR VALUE AND HAS AN IMPACT ON THE TEAM WHICH IS BOUNDLESS. PREMIER-LEVEL SPONSORS' RECEIVE THE HIGHEST LEVEL OF REWARDS, WHICH WILL CONTINUE JUST AS LONG AS THE TEAM EXISTS.**
Your name /company name (or logo) will be indicated in all team publications and on website						
Your name /company name (or logo) will be imprinted on the team's t-shirts and sponsor will receive a free t-shirt						
Your name /company name (or logo) will be displayed at competitions, appear in the Chairman's video, and placed on the robot						
You will receive a copy of the team's annual yearbook and receive a team plaque						

** Sponsorship of the RoboLancers shall begin once funds are received by the team. It shall continue for the minimum of one calendar year, but if the donation is made at the end of a school year, it will continue through the following school year, ending in June, unless an additional donation is made.*

Please send your tax-deductible donation made payable to **The Associated Alumni of Central High School**.[+] **Please make a note on the check: "To be used for Central High School's Robotics Team, the RoboLancers."** The desired logo or company insignia may accompany your check or be emailed as an attachment (in PDF [preferred], JPG, PNG, TIFF, or GIF format), to robolancers@gmail.com. Donations should be mailed to:

Central High School
1700 West Olney Avenue
Philadelphia, PA 19141
Attention: Daniel Ueda, Head Coach.

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ADVERTISING

ADVERTISING OPPORTUNITY

If your organization or you is interested in advertising opportunities in future editions of RoboLancers' Roundtable, please email: robolancers@gmail.com to obtain more information.

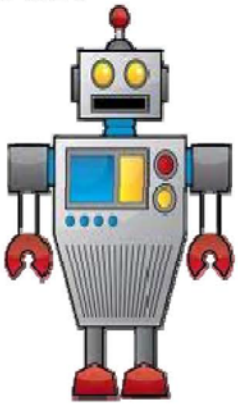
Reserve the Date!

Applebee's

Enjoy a short stack for a tall cause.

You're invited to an
Applebee's® Flapjack Fundraiser Breakfast
to support
Central High School's
robotics team,
The RoboLancers

Make checks payable to **Central High School.**



$9.00 per person

WHEN: Saturday, October 11, 2014

8:00 a.m. – 10:00 a.m.

WHERE: **Applebee's Neighborhood Grill & Bar**
2501 Aramingo Avenue
Philadelphia, PA

For More Information:

Contact Michael Johnson, Coach, at 215-276-5262, Ext. 95, or email robolancers@gmail.com
Come out and meet the team! Enjoy a delicious breakfast and have lots of fun! Raffles, 50/50 drawings and great prizes! The proceeds from this fundraiser will be used to buy parts to build robots for competition.

Valid only at participating restaurant listed above. Ticket valid for pancake event only.
Applebee's menu items are not included as part of purchase.