

# *Los Altos Academy of Engineering* **NEWSLETTER**

*"Building a cleaner, more fuel efficient tomorrow"*

## October 2015



*2015 Los Altos Academy of Engineering Race Team at the Portland International Electrathon*

### **Portland Electrathon**

*By: Michael Attanasio*

The Los Altos Academy of Engineering decided to challenge themselves by participating in the Portland Electrathon. For two consecutive years prior years, LAAE participated in the Emerald Coast Electrathon in Pensacola, Florida. That race consisted of two separate one-hour heats on an oval track. The objective for each team within these one hour frames was to travel the farthest their vehicle was capable of. The Portland Electrathon took place over two days on a

---

winding road course. Each day consisted of two heats: the long track and the short track. The long track consisted of the entire track of approximately 1.910 miles, whereas the short track covered only half of that. Because the

KIWANIS, LIONS, Los Angeles County Supervisor Don Knabe, and many others whom we greatly appreciate were gracious enough to support our organization in with more than \$11,000.00.

team wouldn't be holding a consistent speed like they usually would on an oval track, the Portland race was more demanding.

Our race team for this competition was Kevin Wang, Kenneth Hirscht, Kaitlyn Eng, Samantha Liu, Austin Wang, Jonah

The Portland Electrathon took place on May 24<sup>th</sup> and 25<sup>th</sup> at the Portland International Raceway. Although the distance to Oregon as compared to Florida is significantly less, it was still a hefty expense our organization needed to cover. Our Fundraising Committee was able to reach out to the community and raise a sufficient amount of money. Our local

Treguboff, Anthony Torres, Jaime Estrada, and Jonathan Estrada. The race team was selected carefully so as to include members of several branches of engineering within our organization including electrical, mechanical, composites, and design. This was done to address any contingencies that may occur in the race.

sponsors, such as Industry Hills Rotary,

The first day was a bit ominous. A light

---

rain came down upon the track before inspection. The team was forced to cover the sides of the tent the vehicles were under, as well as shield Speed Racer. As luck would have it, the weather passed with ease and the inspection period ensued.

As opposed to past inspections which were rigorous and seemingly inspected every nut and bolt, this inspection was a bit more informed than the team was expecting. The officials gave the vehicles a look over and claimed they were ready to race.

After clearing inspection, the race began. As both vehicles entered the first heat, the long course, our expectations were that the vehicles would run smoothly and drive for the entire leg of the race. The issues predicted would hurt our performance, Volt's chain and wheel alignment and Speed Racer's motor controller, did not pose a problem in the first heat. Aside from Volt occasionally slowing

down unexpectedly, the first heat ran smoothly. The second heat, proved to be more of a hindrance, but not altogether a problem. To prevent a tire tube from popping as it had the year prior, the team chose to take Volt out for a pit stop and replaced its front tire. As the second heat concluded, the day of racing did as well.

The second day began with a dilemma the team had hoped not to encounter this competition. Speed Racer's chain popped off the vehicle and the tires became misaligned. This problem had also occurred in Pensacola vehicles and there, it took nearly an hour to remedy. The vehicle was brought in for a pit stop to fix the looming issue. The team took as efficiently as any team of engineers could.



*Race Team preparing before the race*

They managed to send the vehicle back out on the track in about fifteen minutes. The team also saw the recurrence of Volt's sudden slowness which was caused by an issue with the motor controller. With no alternative, Volt was sent back out and had to endure occasional bursts of slowness. Even with its issues, it actually performed better than many of the other vehicles.

At the end of the race, Volt had landed in 13th place and Speed Racer in 24th of about 35 vehicles. This competition proved to be a great experience for our team, providing

a depth of knowledge and experience for our underclassmen. The Los Altos Academy of Engineering appreciates all the support we have received and hope to improve in the events to follow.



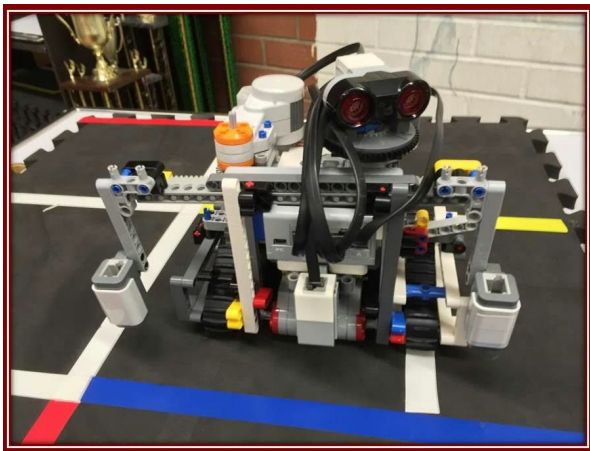
*Race Team with advisor Ed Richter and assistant principal Mr. Hess*

---

## Mini Urban Challenge

*By: Andrew Rojas and Jason Kwan*

Mini Urban Challenge (MUC) has been a staple in the robotics team's two competitions per year for four years now. The main focus of the game is creating a small simulated "car" built out of Lego pieces that are put in motion by the Lego NXT brain. Past years have seen varied success in the competition, with two national advances in prior years. However, this year saw major



*Team One's Mini Urban Challenge "car"*

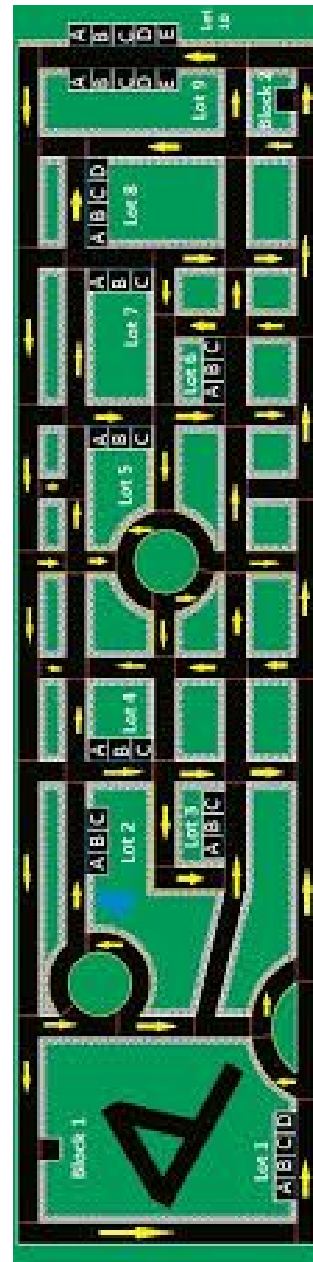
changes in the rules of the competition, with a change in the type of brain used, from NXT to EV3, and a few new elements added in order to shake up the competition and give it new life.

This year, the veteran MUC team, Team One, saw great improvements in performance in comparison to last year. They managed to come in third place in the first of the two qualifying rounds, as well as obtain the "Best in Show" award, for having the best robot in terms of function and form. The second MUC team, team #2, was comprised of only rookies, this having been their first time competing in MUC. For them, the morning session of the competition went extremely well, actually having the highest score of any team by the end of that session.

However, they struggled during the presentation portion of the competition, stressing too hard the fact that they were the rookie team, which actually put off the judges. So for them, the presentation aspect of the competition actually impaired their performance on board, which resulted in them not placing in the competition.



*Mini Urban Challenge, hosted by Doolittle  
Institute*



*Mini Urban Challenge Course Map*



---

*Thank you,*

## ADOPTERS

“We are so proud of you all. Have fun and do your best in Oregon” - *William Treguboff*

“Keep up the great work, Los Altos!” - *Dave & Sara Samarin*

“Go Speed Racer!” - *Jaya Glister-Nava*

“Good luck! Send me a postcard!” - *Jason Ackermann*

“I am also so proud to hear how well you are doing in school” - *Felisha Lara*

“What a great opportunity for aspiring engineers!” - *Michael C. Keith*

“Rawk on, Eric!” - *Todd Hedell*

“Good luck Engineering! I hope you guys do great and be those LAHS Conquerors!” - *Grass Jelly*

“Your program provides great opportunities for our students’ success. Thank you!” - *Rae-Shae Chen*

“Stay safe and don’t crash!” - *Doreen Eng*

“Do... or do not, There is no try” - *Cliff & Sandy Eng*

“Always believe.” - *Chienwu Chen*

“See you in Portland! Best of luck.” - *Ed & Sheila Richter*

“Never give up.” - *Mrs. Wong*

“Make me proud and get rid of all those boyfriends.” - *Crystal Rivas*

“Good luck Ken.” - *Phillip Gonzalez, Ruth Heaton, Raymond Gonzales, & Irene Lopez*

“What a great program. Go Conquerors!” - *Kenneth H. Hirscht*

“Your dedication and hard work is appreciated by all, Ken.” - *Yolanda Hirscht*

“Ken- Good luck! Make your mom proud :-)” - *Mrs. Mann*

“Go Solar Car and Academy of Engineering!!!! Long time supporter” - *Dave Wallach*

---

“Good luck Ken! We are so proud of you! Love, adopted mom and dad” - *W. Gilbert*

“We are so proud of you, Jonah. Keep up the great work!” - *Dave & Lillian Samaduroff*

“Keep the shiny side up, and the rubber side down” - *James Watson*

“Gold star for Mr. Ed Richter, teacher extraordinaire.” - *Patti Briglio*

“Continue doing great work. We are proud of you all.” - *The Shubin Family*

“\$10. Shut up and take my money” - *Mr. Hughes*

“Good luck, Conquerors.” - *Carol Gonzales*

“Good luck, Santiago!” - *Martin Torres*

“Here’s to a fruitful adventure. We love you, Ani.” - *Chach & Carmen*

“Make us proud - Do good- Be a Conqueror!” - *Mrs. McReynolds*

“California proudly supports the Los Altos Academy of Engineering for boldly undertaking new endeavours!” - *Luis Penaloza*

“Jaime & Jon- Wow! I am so proud of you! Keep up the hard work and I know you can achieve all your goals!” - *Mrs. Lien Sun*

“Keep up the good work. Very proud of you. :-)” - *Mrs. Robles*

“Congratulations on your continued efforts.” - *Sarah Saldana*

“Keep up the good work.” - *Shem Franson*

“We’re so proud of you, Kaitlyn! :-)” - *Brian & Pam Eng*

“Good luck to your team! Hope I can watch your race!” - *Mari Eng*

“Best of luck to all. It sounds like a great program.” - *Dave & Marilyn Macaray*

“Best of luck, we have no doubt you will do well.” - *Robert Lopez*

“Keep focused and strong-willed, Kevin! Strive to be awesome!” - *Nina Wang*

“Good luck, Kevin! Hope you do well! Go for the GOLD!” - *The Breakfast Club*

“Go Conqueror! Go Kevin!” - *Wu Chienwen*



---

“Best of luck to Nigel and the Mechanical Team!” - *Jessica Reyes*

“We are thankful our grandson is giving the opportunity to activate his creativity.” - *Mike Treguboff*

“I hope Engineering does good this year! Love you, Nigel. <3” - *Gabriel Castro*

“Armando Jr., we are proud of you! Keep reaching for the stars!” - *Oscar & Bonnie Barron*

“Have a great time and take lots of pictures!” - *Lisa Ruiz*

“Roses are red, violets are blue, make me proud of you.” - *Crystal Rivas*

**we changed our  
number!**

**los altos academy of engineering:**

**(626) 934-5514**



Thank you,

# SPONSORS



# *Los Altos Academy of Engineering*



## STAFF WRITERS:

SANDY KIM

MICHAEL  
ATTANASIO

ANDREW ROJAS

JASON KWAN

## EDITORS:

SANDY KIM

MR. RICHTER

## UPCOMING DATES:

DECEMBER 2  
5:30 PM IN A14:

LAAE PARENT  
MEETING

## THANK YOU!

WE WOULD LIKE TO  
THANK ALL OF OUR  
WONDERFUL  
SUPPORTERS FOR  
ALLOWING US TO GO  
TO THE PORTLAND  
ELECTRATHON  
AGAIN THIS YEAR.  
OUR TEAM  
IMPROVED  
TREMENDOUSLY  
AND COULDN'T HAVE  
DONE IT WITHOUT  
YOU!

## CONTACT US!

**LOS ALTOS  
ACADEMY OF  
ENGINEERING**

15325 E. Los Robles  
Ave.

Hacienda Heights,  
CA 91745

**Phone:**  
(626)-934-5514

**Fax:** (626)-855-3145

**E-mail:**  
pr@lasv.org

