

2016-2017



Los Altos Academy of Engineering

“Building a cleaner, more efficient tomorrow”

December 2016



Engineering Class of '16-'17



Congressional App Challenge

By Jason Kwan and Christine Castrellon

This year, the students of the Los Altos Academy of Engineering decided to participate in the Congressional App Challenge for a second time. The Engineering program decided to send three teams to compete in the challenge this year compared to one team last year. Our teams did well taking home first and third place in the competition.

Our champion is comprised of Santiago Torres, Jason Kwan, Chris Leung, and Chris Jhaveri. After careful consideration in sifting through tremendous amount of ideas, the team decided that the app should deal with the upcoming election. The center focus of the app is to provide voters with relevant information regarding political issues. Santiago Torres, leader of the team, states, “We realized how

misinformed and negligent the mass populace of America is regarding the election. That is why we created the app to better prepare and educate voters so that America can truly become aware again.”

The app essentially allows the voters to be connected and so was aptly named, “Election Connection.”



Another team participating in the challenge consists of Amy Tam and Vicky Zhai. The duo’s creation “StuDay,” is a student oriented app which focuses on student’s struggle when it comes to fighting procrastination, keeping track of schedules and notes, and completing annotations. The two found their inspiration through the daily

battle of time management. Team leader Vicky Zhai says, “We felt the app connected to us personally out of all the ideas that we played around with.” Through personal experiences the team was able to create an app that catered towards the daily needs of struggling students.

The third team to enter in the competition was “Brain Train” with members Breeze Hernandez, Tiffany Liao, and Aum Brahmhatt. The app is designed to combat and raise awareness of Alzheimer’s disease, by gradually helping to improve the condition of the diagnosed through interactive memory games. In conclusion the participants did an exceptional job at this year Congressional App Competition.

Solar Challenge

By: Kevin Pan

This year, LA AE will be working toward competing in the Winston Solar Challenge

in Dallas, Texas. However, this year will be more difficult than the previous years. The car will be constructed with stationary solar panels and will be the first passenger vehicle for the program. The Los Altos Academy of Engineering will be competing in a new division and constructing a car solely based off the requirements and their intuitive.

“We plan on competing in the Electric-Solar Division of the Winston Solar Challenge, which means that the car we will be building will not have solar arrays attached to the car” said Goldwin Tang, electrical member of the team. Rather, the program will build a solar charging station, charge our batteries, then put the batteries into an electric car. The goal of this division is to make solar vehicles more realistic, so LA AE can build this vehicle into something that you would see driving on the street in the potential near future.

LA AE will be building this car from scratch, which means that the students will

be making their own designs, welding their own pieces, etc. There will be no kit, which means that the vehicle will be one of a kind. The car will be almost as big as a full sized sedan, with the minimum requirements for the car to be around 14.5 feet, 5 feet tall, and 5 feet wide. This will be a massive project, and the program looks forward to being able to see this car completed.

CNC Plasma Cutter

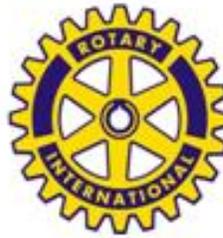
By Erika Galvan

This year, the Los Altos Academy of Engineering received a CNC plasma cutter and has been constructing the tool for the first part of this year. The CNC plasma cutter is used to create clean precise cuts using computers to control machine tools. The tool is commonly used for quickly cutting through sheet metal, metal plates, straps, bolts, and pipes making it easier for our engineers to complete their projects

more efficiently. Senior Jonah Trogubuff has taken on the challenge of constructing the project hands on. Jonah says, “ Even though the construction of the CNC Plasma Cutter is turning out to be more problematic than planned, it is worth the hassle because with this new tool it will speed up the production and quality of new parts for the program.”



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