SCHOOL SCENEin Almaden Valley

Leland, Pioneer robotics clubs enter regional tournament

Students create robot in six weeks to compete against 48 teams nationwide

By Eric Zimmerling Times Intern

Leland High School's robotics club will be one of 48 teams nationwide competing in the regional Silicon Valley Robotics Tournament held annually at the Event Center at San Jose State University March 16 and 17.

The 28 students that make up the club will compete with "Rack N Roll," a robot the team has been frantically working on since Jan. 6 when the game rules and regulations were announced to all teams via pod cast.

In six intense weeks, the students work together to brainstorm, design, and construct and test their robot with the help of their advisor, Helen Arrington. With only six weeks before competition, jobs are assigned within the club and the work begins immediately. The teams then compete in a spirited, no-holdsbarred tournament complete with referees, cheerleaders and time clocks.

Amy Qian, a senior at Leland High School, said the robot could not have been built without hard work from everybody.



The Leland High School Robotics team with their advisor Helen Arrington (second from right, back row) behind their robot "Rack N Roll," a robot the team constructed to compete at the regional Silicon Valley Robotics Tournament in the Event Center March 16 and 17. Photo by Eric Zimmerling

"Everybody is doing different things all the time," said Qian. "We have two drivers, a coach, and a human player controlling the robot at the competition, but there is so much more to the project than that. The wooden platform the robot sits on was built by somebody else, the ramp that will lift up other robots from out alliance that gives us extra points was built by another person, it is just a real team effort."

Every regional competition the rules change, so the design of the robot has to change with it.

This year, teams needed to create a robot that could move, pick up and place rings on a centralized unit with extended arms, and build ramps that could lift their two allied robots off the ground.

Helen Arrington, teacher and robotics club advisor at Leland High School, said the time and effort the students put into learning about engineering and working on the robot is a yearlong project.

"This takes a lot of commitment," said Arrington. "The students are dedicated to the program all year long. It is not like they are receiving a grade for all the work they're doing, they just work together, gain great experience for the future, and have fun."

The robotics club is able to build their machines with money provided by the school, donations from local businesses, and through fund-raising events by the students of the club.

Pioneer High School robotics team will also be entering a robot among the 48 teams at the Silicon Valley Robotics Tournament.

Lonny Weissman, advisor of the robotics team at Pioneer High School, said his 15 students are excited about the upcoming regional tournament.

"We are confident about our robot," said Weissman. "The 48 teams is the largest field ever at San Jose State, but we feel good about what we've done. The kids have worked really hard and built a great machine, we're just putting the finishing touches on it right now, but we'll be ready to go when its competition time."

Both teams hope to finish well at the regional tournament so that they can have momentum going into the international tournament that will be held in Atlanta later this year.

"We just hope not to break our robot during competition," said Weissman. "We don't have any time to fix it when the competition is over at San Jose State. It is going to get shipped off to Atlanta where we won't see it again until its time for the competition. My kids have put in so much work, we just hope to do good but that is never guaranteed—having fun will be guaranteed though."