

MILILANI HIGH SCHOOL FIRST ROBOTICS

A SCIENCE LEARNING CENTER PROGRAM



BUILD SEASON BEGINS!

Our first step of build season was understanding the rules. We were assigned groups, whom we collaborated with to read the rules and make thinking maps, or info-graphics. The rules included topics such as: the arena, game, robot, and the tournament. It is important to read the rules early so we won't have to remake anything, or worse, be disqualified!

In order to put our theory into practice, our mentors came up with a board game to simulate a real event. Different materials represented different aspects of the field. Each team was given an amount of time to "spend" on actions; the game was organized into five sessions of 30 seconds to spend on each robot, and sessions alternated between alliances. As an alliance, we had to decide what our goals were, and what our strategy was to meet them. A lot of communication was necessary between the teams in order to meet their objectives within the time constraint.

After we understood the flow of the game, we began to imagine robots that could fulfill the strategies that we created. As a group, we made prototypes, using paper, LEGO, or other materials and presented it to the entire team. We improved them, then presented our new designs with the PDR (Preliminary Design Review) process. From there we decided what design aspects we wanted as our final design for our robot. Once we all came to a compromise, we made a list of what we had to do next.



The Mechanical team working out all of the dimensions for the "forklift" aspect of the robot.



Miko Abagon, Bryson Goto, and Raena Baetiong creating the pseudocode for crossing the portcullis during autonomous mode.

THE GAME: FIRST STRONGHOLD • MIDDLE SCHOOL VISIT

Check out the game reveal at:

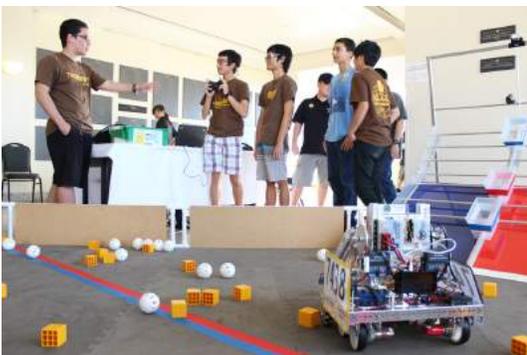
<https://www.youtube.com/watch?v=VqOKzoHJDjA>



HOLIDAY TECH FAIR

On December 29th, the team went to the Japanese Cultural Center to attend the annual Holiday Tech Fair where we showcased our FTC robot "Donut Hole". During this Tech Fair we had the opportunity to communicate with others about our teams efforts and what we have achieved so far. We got to tell people about the STEM camps that we hold and our FTC Engineering Notebook. Visitors also got a chance to drive our FTC robot. It was interesting to see what other technology companies are in Hawaii. An FRC Competition event sponsor, Booz and Allen Hamilton, was even there!

Some members of our team, presenting the FTC robot at the Holiday Tech Fair.



Our Generous Sponsors



Upcoming Events

- Mililani Carnival

February 19-21 at
Mililani High School

- Open House

Tuesday, February 23
at C-106

- Bag & Tag Day

Tuesday, February 23

- FRC Hawaii Regional

April 1-2
at Stan Sheriff Center

For more updates visit us at:

Blog: <http://mililanirobotics.org/blog>

Youtube: Mililani High School FIRST Robotics