



# 2439 Baldwin Robotics



H.P. Baldwin High School

[www.baldwinrobotics.com](http://www.baldwinrobotics.com)

Winter 2011/Volume I

## MECO & MEDB

by Jonathan Bach

On August 27, Maui Electric Company (MECO) hosted an exhibition called "MECO in Our Community" at Queen Ka'ahumanu Center. The purpose of the annual event was to inform the community about energy. The exhibition offered facts about energy conservation, renewable energy, electrical safety and environmental effects. It consisted of many booths, each displaying different information and tips on how we as a community can contribute and save electricity.

MECO has always been a big part of the County of Maui, and helps out many organizations in its community. For years, the company has been a big sponsor of our Baldwin Robotics team and we are very grateful for their support.

Baldwin Robotics participates in the "MECO in Our Community" exhibition every year, where we display and demonstrate our robot to the public. We had our robot perform its functions on stage as we informed the audience about robotics and the FIRST program. We gave out temporary bear claw tattoos to kids to help share our Bear pride. Our goal was to get more people, particularly young children, interested in science and engineering for the future of our community.

On the same day following the "MECO in Our Community" exhibition, Baldwin Robotics' student officers participated in the 2011 MEDB Ke Alahele Education Fund Benefit Dinner & Auction at the Grand Wailea. Hosted by the Maui Economic Development Board, this event helps to stimulate community investments in career pathways for the residents of Maui. It also seeks to improve education in our community, particularly in science, technology and engineering.

During the MEDB event, Baldwin Robotics helped run a mini VEX robotics competition that entertained guests and demonstrated how fun robotics can be. Baldwin brought several VEX bots and helped to set up the competition. Guests were invited to drive the bots and compete on either the red or blue team, coached by robotics students.

All of the guests enjoyed the event and it was a big success. More than 600 people attended the dinner, the highest attendance ever at this benefit fundraiser.



Team Captain Jun Sasaki coaches Council Member Bob Carroll during a robotics game at MEDB's Ke Alahele Education Fund Dinner.

## Bearbotics in the Community

By Kim Nguyen

Baldwin Robotics is very active in the community. Our goal is to raise public awareness about robotics for students, as well as to give back to our school and community. Here's what we've been up to lately:

- For about a month, we spent our Wednesday nights painting trash cans for the Maui Fair.
- We competed in the Maui regional VEX tournament, and assisted some of the other schools such as Iao Intermediate and Maui Waena with their VEX robots.
- This is our fourth year participating in "MECO in the Community", where we demonstrated our robot at Ka'ahumanu Shopping Center and shared information about our program with the general public.
- Baldwin High School recently opened a brand-new library, which took nearly 3 years to build. The robotics team volunteered to be a part of a human chain that moved books from our old library to our beautiful new one.

# Motivating Menehune Minds 2011

by Layke Yamauchi



In June, Baldwin Bearbotics hosted a weeklong robotics workshop called Motivating Menehune Minds for students in grades four through eight.

On the first day, 43 students were introduced to the 20 team members who would be mentoring them for the next five days. The students were split into two groups. One tried their hand at creating custom VEX robots, while the other began building and programming OWI binary robots. Then they switched off.

With the VEX robots, students formed groups of threes and received a VEX kit to work with. Each small group was assisted by a friendly Bearbotics member who offered suggestions and advice. The goal of this program was to have a working robot by the end of the week that could compete in a mini-tournament. The main focus was on teamwork and ingenuity, and every team succeeded in building and programming their own VEX bot, something each student could be proud of.

The other section of the workshop, building OWI binary robots, was similarly successful. Each student received his or her own binary robot kit. After being briefed on safety and appropriate conduct, they received their supplies and began building their individual bots. The students also learned how to program them to do simple tasks, such as moving forward or from side to side.

On the last day, the students showed off their robots in a VEX mini-tournament and a skills assessment of the OWI binary robots. Family members were invited to watch the fun, and there was lots of excitement and cheering. Certificates were awarded, and everyone was a winner. This workshop was a great experience not only for the students, but also for Baldwin team members, who work year-round to share their knowledge and excitement about robotics and technology.

## VEX Robotics

by Kristen Hasegawa

Since summer, Baldwin Robotics has been working hard and has already entered two competitions during this new school year: the Maui Fair VEX Robotics Competition on October 1<sup>st</sup> and the Hilo VEX Robotics Competition.

At the Maui Fair, we entered not just one, but three robots: 2439a, 2439b, and 2439x. Team members Jacques Arnoult and Raven Cariaga built 2439a. Robot 2439b was built by Thomas Sturm and Blayd Calaro, and number 2439x was built by Jun Sasaki, Brandon Waite and Rex Madamba. In all, 30 teams competed at the Maui tournament, and 2439x won first place, qualifying the team to compete at the VEX World Championship in Anaheim, California, in April 2012. Baldwin's VEX teams didn't just compete against teams from Maui; they also competed against teams who traveled from other parts of the state such as Molokai and Kona.

A week later, all three of our robots went to the Big Island to compete as well. There, they faced a field of 36 teams. Out of all those teams, our robot 2439x won the Amaze Award. This award goes to the team that built the best quality robot out of all the competitors at the meet. So far, it looks like 2011/2012 will be another awesome year for Baldwin Robotics!

## Member Spotlight

by Jong Choi



**Name:** Takumi Nishida

**Years In Robotics:** 2 Years

**Team Position:** Treasurer

**Rigorous Classes:** A.P. Chemistry, A.P. Calculus, Honors Physics

**Activities/Hobbies:** Gaming, drawing, rollerblading, going on the Internet, hanging out with friends

**Clubs:** MAG (Manga, Anime, Gaming), Interact, Robotics, Japanese Club

**Favorite Thing about Robotics:** The annual trips and being with other Robotics members

**Working on This Year for Robotics:** Web Design

**What are you learning in Robotics?** I'm learning how to work together with my teammates to create a better robot. I'm learning about dedication and how everyone has to dedicate themselves to get something done.

# Baldwin Robotics Enjoys Best Season Ever

by Melissa Le

Baldwin Robotics achieved its best year ever, becoming a regional finalist twice in March 2011. They made it to the final matches at the FIRST Robotics San Diego Regional Competition on March 12. On March 26, they became finalists again at the FIRST Robotics Fourth Annual Hawaii Regional Competition.

After playing 10 seeding matches in the San Diego tournament, Baldwin Robotics Team No. 2439 formed an alliance with Catlin Gabel High School from Oregon and Lancaster High of California for the final rounds. We competed against Sweetwater High School, Bellarmine College Preparatory of California and Cimarron-Memorial High School of Nevada. Baldwin's alliance lost two out of three final rounds to take second place. One of our bot's distinguishing features was a line tracking system that allowed our robot to score points in autonomous mode. We were the only team that could accomplish this consistently.

Two weeks later, Baldwin took second again at the Hawaii robotics competition. The objectives of the matches were the same as in San Diego. Baldwin formed an alliance with Lahainaluna and Waiakea high school and squared off against Waialua, McKinley, and Kealahou high schools in the final matches.

The whole team felt very accomplished with their victories after the intensive six-week period they had to design, construct, and program a competitive robot. The results are a huge improvement over previous years.

"We've had an incredible season, and I'm very proud of our team for making it to finals not just once, but twice this year," said Lead Advisor Gary Suter. "To be able to go toe-to-toe with the state's most veteran teams is a major accomplishment for us."

Baldwin Robotics was formed four years ago and is already considered one of Hawaii's top teams. We also received the Creativity Award for our creative use of components in the robot's design.



# Thank You Sponsors & Community Donors!

by Melissa Le

To our generous sponsors and community donors, thank you for supporting Baldwin Robotics! Because of your donations, Baldwin enjoyed a very successful 2011 season. We were a finalist in not one, but two, FIRST Robotics regional competitions. Our team has grown from 19 to about 30 members due to our recent success and members who recruited peers. Without your donation, we couldn't have achieved everything we did during this memorable year.

Our success has generated stronger interest in the team throughout our campus and the community. With your support, we continue to inspire young minds throughout Maui at events such as MECO in the Community, during which we demonstrated our robot and talked about the FIRST program. During the summer, we ran a five-day robotics program that gave team members an opportunity to interact with incoming freshmen. The program allowed us to demonstrate and teach younger students about VEX. The program helped prepare the freshmen for what Baldwin Robotics has in store for them during the 2011-2012 school year.

Our goal this year is to reach even higher and continue to spread the word about robotics and FIRST. Whether it's continuing to recruit new members or preparing for the FIRST competition this upcoming year, we are willing to do whatever it takes to inspire. Already underway are several workshops related to software programming, machining, welding, safety, website design, and video production. Although we won't start our FIRST build season until January 2012, we're holding workshops three or four times a week, and each member is asked to contribute at least an hour a week to the club.

We're proud to display our sponsors on our signature jerseys, robots and team brochure, and all our sponsors and community donors on our website and competition banners. Your support has really given all of us, students and mentors, an unforgettable opportunity to be a part of an exciting program that teaches us new skills and challenges us to constantly improve. We thank you for your tremendous generosity. Baldwin Robotics wouldn't have had our best year ever without you, and we hope you'll continue to support us!

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