



HALLOWEEN FUN – HPU ROBOTICS CLUB

Robotics for good club newsletter Fall 2017 Edition

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Welcome Note

by Club President (Author), Dr. Catherine Ghourani (Editor)

We are delighted to launch the first newsletter for the newly formed HPU Robotics Club, with incoming President Danny Hermosillo leading the way in all things robotics.

Location, Teams and Participation

The Club has a new home on the 4th floor of the LB building and welcomes students who wish to join the Club, from across the university.

You don't have to be an engineer or code to participate; we have members from a variety of departments and programs, such as marine biology. Whether you're in your first or final year, you can become an active Club member, join a team in either Land, Air, Sea or Outreach and work away with your fellow team members on a number of different hands-on robotics projects.

Equipment and Facilities

The Club has a physical laboratory, including two rooms with lots of equipment; from a commercial drone, to a self-assembled, programmable drone, from a state-of-the-art underwater BlueRov2 ROV running on the Pixhawk microcontroller to a land-based

programmable, Arduino-platform rover. The outreach team has several package-based robotics kits for assembly and school engagement; to get the younger generations interested in robotics.

The choice is yours – join the Club and pick a team. You then get exclusive access to the lab and equipment, where you can come and go at your leisure, to work on your project.

Note from the incoming Club President

Hello future and current members! My name is Daniel Mendoza Hermosillo. I will be your new club president from Spring 2018. I have experience in robotics on a competitive robotics team with V.E.X. as well as in coding and building different robots from PLTW. I hope that this club will be of benefit not only to those interested in engineering but for other majors too!

If you're interested in joining the club or have an inquiry, feel free to contact the Club or me directly at:

robotics.hpu@myhpu.edu,
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Pictured: Club Members and Tram (Team Leader, Land) & Alex (Treasurer) at Hawaii Loa Campus

On-Campus Events

Club Carnival at ATM and CNCS Meet-and-Greet Day at HLC – Club members participated at the Aloha Tower Marketplace (ATM) and Loa Campus, chatting to new students about the Club, demonstrating sensors and discussing parts and functions of a robot. At Loa, along with the Engineering Faculty and other departments within the College of Natural and Computational Science (CNCs) Club members engaged newly enrolled students in candy-Jenga games and a robotics sensor game as well as discussing Club activities within the Sea, Land, Air and Outreach Club teams.

Club Connection Meetings – Robotics Club members have represented at all Club Connection Events, which involved briefing over 50 other club presidents/officers with current and future Robotics Club events and projects. This also gave members an opportunity to coordinate with various Club presidents or officers on future collaborative events.



Halloween Fun Fest ~ Club members prepared, decorated and engaged in an extremely active tent/table for the Halloween Fun Fest at the Aloha Tower Marketplace (ATM). Thanks to Danny and Sarah for creating the Robot Costume that features as the main photo on this newsletter. Super job by Danny enduring the heat and lack of movement wearing the costume and being Mr. Robot! Great work by Isabella, Johana, Alicia, and Natalie on the fast work putting the tent decorations together and along with Anthony, Sarah, and Danny in prep work on the decoration team.

The event enabled interaction with the keiki (kids) and this alone was superb. Tram and Joe were impressive in the way they communicated so well with the kids. For those who didn't get a chance to see it, Tram put together a hover craft robot while sitting the table and entertaining kids and the hover craft was tested on both a smooth walkway and uneven bricks, and worked on both...awesome!



At the Car Wash Yeah! ~ Club members held a Robotics Club Car Wash on Saturday, 04 November 2017. Awesome job by both Johana and Isabella with creative advertising to cars/potential customers and with sign creation.



High School Counsellor Event ~ The Robotics Club members gave demonstrations to 78 high school counsellors who came from across the state of Hawaii to learn more about the new engineering programs being launched in Fall 2018. HPU is preparing to launch three new programs in: Electrical Engineering, Biomedical Engineering and Biotechnology Engineering.

The Robotics Club members prepared the Robotics Club area and Circuits Lab for the event, along with Dr. Ghourani, setting up circuit equipment for display. As counsellors arrived, Glen, Danny and Aya presented introductory briefings on the Robotics Club and HPU's engineering programs to the high school counselors that came in two groups. Feedback received indicated that again the Club members did a great job.

Off-Campus Events



Photo above from PanPacific VEX Robotics Competition

Volunteering at the Nanakuli Robotics Competition in Kapolei ~ Robotics Club volunteers traveled northwest from downtown Honolulu to Kapolei to volunteer at the Nanakuli High School Robotics Competition. Club members were fortunate to be able to participate in the event as robot inspectors, judges, guides, and information representatives. The experience was amazing and members were blown away by the level of prowess of high school students!

Where the Drone Leads! TV Broadcast ~ by Danny Mendoza Hermsillo ~

In this segment I discussed where I would like to see the Robotics Club go and received several questions on where I thought drones would lead. The progression of drones is being seen in many different aspects of life such as in search and rescue. This trend would lead to drones that can do other things such as perform service in the agricultural sector; where drones, if coded correctly and autonomously, could plant seeds, fumigate fields, take readings of crops, and so much more. This generation has seen component construction, the next will make them efficient and user friendly. It all starts with a step into STEM.

Club Meetings

Feel free to drop by!

We held the initial Robotics Club orientation meeting in UB209, where we began with introductions, followed by challenge games, demonstrations, fun sensor and robotics familiarity quiz, **PIZZA** and then a trip to visit the Robotics Club lab area, where we

discussed lab rules, team lockers, viewed robot projects for Air, Sea, and Land teams and the kits for the Outreach team.

Subsequent meetings were held in both LB-Penthouse and the Robotic Club Lab.

In all meetings we discuss current and future events, possible club fundraisers, robotics projects that members are working on and more, as well as introductions of new members.

MEMBERSHIP

It costs nothing to be a member at our club. We are always on the look out for active participants. You don't need to be a programming or engineering guru (but we welcome those too!)

EASY TO JOIN, JUST CONTACT DANNY

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