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Daisy
Hexopod Robotics Kit

Robot All★Stars



Coach: Professor Howie Choset

Hometown: HEBI Robotics

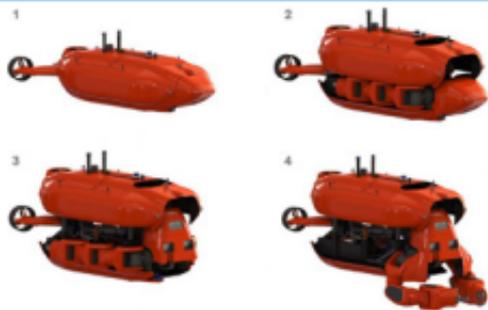
Stats: Daisy a.k.a “X-Monster”, is a six-legged robotics kit allowing you to build custom modifications easily. The mobile platform can be combined with other kits using standard hardware. Moving like a spider, it can go across lots of different terrain.

Fun Fact: Daisy has 18 degrees of freedom, making it a smooth dancer!



Aquanaut
Unmanned Underwater Vehicle

Robot All★Stars



Coach: Nic Radford, co-founder, CEO, CTO

Hometown: Houston Mechatronics

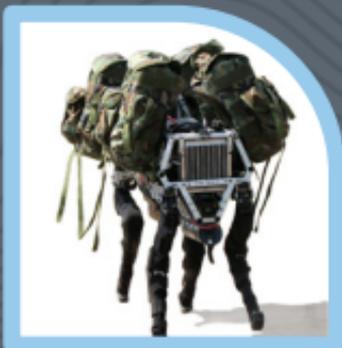
Stats: Aquanaut is a shape-shifting robot that can change from Autonomous Underwater Vehicle to a Remotely Operated Vehicle. Aquanaut can work without a tether, eliminating the need for a topside crew, and keeping humans out of harm's way.

Fun Fact: In ROV mode, the head pops up and arms extend, making it look slightly humanoid.



AlphaDog
Quadruped Robot

Robot All★Stars



Coach: Marc Raibert

Hometown: Boston Dynamics

Stats: AlphaDog is a 4-legged robot following alongside troops using GPS and computer vision. The robot can carry up to 400 pounds of equipment for 20 miles, significantly reducing the load of a soldier.

Fun Fact: AlphaDog is also known as a Legged Squad Support System.

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Chaos High Mobility Robot
Mobile military robot

Robot All★Stars



Coach: Mel Torrie

Hometown: Autonomous Solutions, Inc.

Stats: Chaos has four independently rotating tracks so it can “swim” over terrain. The highly mobile robot can carry up to 275 pounds. Strong and mobile, it can be used for EOD or other dangerous missions.

Fun Fact: Chaos can climb grades up to 70% as well as stairs.



Cubelets
Magnetic blocks

Robot All★Stars



Coach: Eric Schweikardt

Hometown: Modular Robotics

Stats: Cubelets take blocks to the next level. With magnetic connections, each block is a sensor just like a robot. The blocks are divided into categories: Sense, Think and Act. More advanced users program to change the behavior of the block.

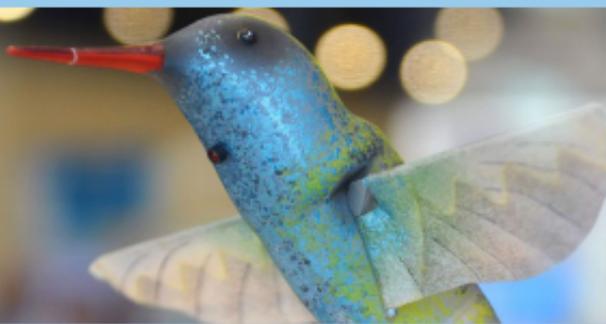
Fun Fact: One Cubelet block is a speaker, to code your own song!



Hummingbird Nano Air Vehicle (NAV)

Remote Control Aircraft

Robot All★Stars



Coach: Wahid Nawabi

Hometown: AeroVironment

Stats: Hummingbird Nano is a remote controlled ultra light aircraft sponsored by DARPA. The aircraft took inspiration from a hummingbird and includes its own energy source and camera on board. It is intended for urban missions where large equipment will not function.

Fun Fact: Hummingbird NAV was recognized by Time Magazine as one of the 50 Best Inventions of 2011.

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iRobot® Create® 3
Mobile development platform

Robot All★Stars



Coach: Steven Shamlian

Hometown: iRobot Education

Stats: iRobot's Create® 3 educational robot offers a suite of sensors and actuators to fuel advanced exploration using ROS 2 or Python libraries! Communicate with the Create® 3 using Wi-Fi, Ethernet over USB, or Bluetooth® Low Energy connections. The robot features a buildable design and comes with a Home Base® charging station.

Fun Fact: The Create® 3 robot can also be controlled by the iRobot Coding App!

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RVR+
Programmable Mobile Robot

Robot All★Stars



Coach: Paul Copioli

Hometown: Sphero

Stats: RVR+ is drivable out of the box, allowing students to program the robot and suite of sensors. With the expansion plate, you can connect other hardware including RasPi and littleBits. Coding ranges from Scratch to JavaScript or beyond.

Fun Fact: RVR+ includes a color sensor so you can navigate a maze by color.



Stanley
Autonomous Vehicle

Robot All★Stars



Coach: Sebastian Thrun

Hometown: Stanford University Racing Team

Stats: A modified Volkswagen Touareg, Stanley won the DARPA Grand Challenge in 2005 driving autonomously on a grueling course through the desert in Nevada. The car has five LiDAR units mapping its environment, video cameras and sensors, in addition to GPS.

Fun Fact: Over 100,000 lines of code were developed to help Stanley navigate.

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Stuntronics
Animatronic Stunt Doubles

Robot All★Stars



Coach: Barbara Bouza

Hometown: Walt Disney Imagineering

Stats: Stuntronics are animatronic stunt doubles. They have untethered movement, and can use angular momentum to achieve precise, repeatable aerial motion control. They can pose, flip and twist through the air.

Fun Fact: Spider-Man movie used a Stuntronics robot, and 3d printing.