EVO³
Portable, Data-Capturing UAV
2016 ROBOT All-Stars
Evo³

2016  ★  ROBOT

All-Stars

Coach: Christian Sanz

Stats: Autonomous flight and landing; autonomous battery charging and data extraction; simultaneous deployments for large sites; geofencing and collision avoidance

Hometown: Skycatch Inc.

Fun Fact: Comes in a shockproof and weatherproof case with everything you need to start gathering hi-resolution data today.
CREATE 2
Programmable Robot

2016 ROBOT All-Stars
Coach: Colin Angle

Stats: Affordable STEM resource for educators, students and developers; can help users grasp the fundamentals of robotics, computer science, and engineering

Hometown: iRobot Corporation

Fun Fact: Create 2 can also go beyond programming by attaching sensors, electronics, grippers, and other cool things.
OLLIE
Smartphone/Tablet-Controlled Toy

2016 All-Stars

All-Star Robotics Week
Position: Smartphone/Tablet-Controlled Toy

OLLIE

2016 All-Star

Coach: Paul Berberian

Stats: Polycarbonate shell protects its engine while the robot’s design repels water; on-board intelligence tracks distance, airtime, color preferences, trick combos, and more

Hometown: Sphero

Fun Fact: Ollie apps use a 360-degree touchscreen joystick control scheme, similar to a video game interface.
BiOM ANKLE

Power-Propelled Prosthesis

2016 ROBOT All-Stars
BiOM ANKLE

Coach: Charles Carignan, MD

Stats: Enables amputees to walk farther and faster; reduces joint forces; improves safety and stability on variable terrain; eases climbing of ramps, hills, and stairs

Hometown: BionX Medical Technologies, Inc.

Fun Fact: More than 1,000 people have been fitted with the BiOM Ankle, the only prosthesis with powered propulsion for enhanced mobility.
Position: Electronically Connected Teddy Bear

PARIHUG

2016★ROBOT

All-Stars

Coaches:
Xyla Foxlin & Harshita Gupta

Stats: Uses a suite of soft, fabric-based sensors that detect a hug on one bear and then transmit a message to another bear, regardless of the distance between them.

Hometown: Parihug

Fun Fact: Hugging the bears releases the same blast of oxytocin (hormone that plays a role in social bonding) that a real hug does.
SELF-DRIVING CAR
Autonomous Vehicle

2016 ROBOT All-Stars
SELF-DRIVING CAR

Coaches: X—formerly known as Google

Stats: Navigates through many complicated scenarios on city streets; uses sensors and software to sense and avoid objects like pedestrians, cyclists, and vehicles

Hometown: Google Inc. (X)

Fun Fact: Self-driven more than one million miles and currently out on the streets of Mountain View, Calif., Austin, Texas, and Kirkland, Wash.
EmERGie

2016 All-Stars

Coaches:
Ayanna Howard, Alan Wagner & Paul Robinette

Stats: Built from a Turtlebot 2 base and two Pincher AX-12 arms, this robot can perform several gestures to safely direct panicked evacuees

Hometown: HumAnS Lab at Georgia Tech

Fun Fact: Designed using feedback from more than 1,000 participants in dozens of Internet-based experiments.
FLEX ROBOTIC SYSTEM
Surgical Assistant

2016 ROBOT All-Stars
FLEX ROBOTIC SYSTEM

Coaches:
Howie Choset, Marco Zenati, MD & Alan Wolfe

Stats: Intended for robot-assisted visualization and surgical site access to areas in the adult throat; also provides accessory channels for compatible flexible instruments for minimally-invasive surgery

Hometown: Medrobotics Corporation

Fun Fact: The system can navigate a nearly 180 degree path to reach challenging surgical targets.
WeDo 2.0

Stats: Includes 280 brick pieces and a Smart hub that interfaces with a motor, motion sensor, and tilt sensor; connectivity comes via Bluetooth LE; projects are programmed via iOS, Android, PC, or Mac.

Hometown: LEGO Education, LEGO Group

Fun Fact: Offers more than 40 hours of guided and open projects specifically designed to enable students to enjoy programming, robotics, and engineering.
FETCH AND FREIGHT
Autonomous Warehousing System

2016 ROBOT All-Stars
Coach: Melonee Wise

Stats: This two-part system has a mobile base called Freight and an advanced mobile manipulator called Fetch; Fetch selects items from a shelf and Freight provides quick transit through a warehouse.

Hometown: Fetch Robotics, Inc.

Fun Fact: An integrated, web-based front end allows managers to get real-time access to warehouse stats.