

Perseverance Semi Autonomous Mars Rover





Coach: Jenniler Trosper, Project Manager

Hometown: NASA

Stats: Perseverance is a semi autonomous rover exploring the surface of Mars. Its cameras and other equipment search for evidence of life on Mars.

It has been sampling rocks and sending back images and sounds from Mars since landing in 2021.

Fun Fact: Perseverance also carried a small Mars Helicopter (Ingenuity) on board, giving a new view of the planet.









Roomba[®] j7





Coach: CEO Colin Angle

Hometown: iRobot

Stats: The Roomba[®] j7 robot vacuum uses iRobot Genius Technology and PrecisionVision Navigation to recognize and avoid common objects in its way.

It can create personalized cleaning suggestions and allow scheduling multiple cleanings per day.

Fun Fact: The j7 is able to recognize and avoid Pet Waste, the iRobot P.O.O.P. promise (Pet Owner Official Promise)









Lego Education SPIKE™ Prime Educational Kit





Coach: Esben Staerk

Hometown: LEGO® Education

Stats: With LEGO building elements and an intuitive drag-and-drop coding language based on Scratch, SPIKE Prime teaches problem solving through play.

With the SPIKE Prime Hub, motors, and sensors, students can create a variety of projects.

Fun Fact: Advanced students can also learn text based Python coding.









Stretch

Mobile automated warehouse handling





Coach: Robert Playter

Hometown: Boston Dynamics

Stats: Stretch is a versatile mobile robot for use in warehouses. It can unload trucks, build pallets and handle cases with ease.

The robot has an advanced vision system, gripper on a seven degrees-of-freedom arm and mobile base.

Fun Fact: The high capacity batteries last a full work shift without a coffee break!









TUG Hospital Robot





Coach: Aldo Zini

Hometown: Aethon

Stats: The TUG autonomous robot works in a hospital moving materials, medications, food and supplies efficiently around the hospital.

The robot has obstacle avoidance, omni-directional navigation, and signals when it arrives at the nurses station.

Fun Fact: For hospital clients, on average, TUGs move over 370 miles every week.











IONIQ 5 Robotaxi Autonomous Vehicle





Coach: Karl Iagnemma

Hometown: Motional & Hyundai Motor Group

Stats: The all electric IONIQ 5 based Robotaxi is Motional's first commercial vehicle and a partnership with Hyundai Motor Group. It has more than 30 sensors with camera, lidar and radar along with driverless technology including machine learning so it can navigate safely through the streets.

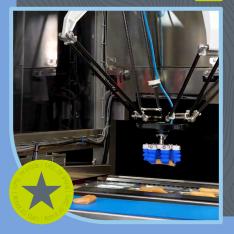
Fun Fact: A rider-focused interface lets passengers interact with the vehicle for things like making extra stops.











mGripAl Smart Gripper





Coach: Jeff Beck and Mark Chiapetta

Hometown: Soft Robotics

Stats: mGripAl adds 3D vision and artificial intelligence to the soft gripper. The Perception Modules act as eyes sending 3D images to the Intelligence Module.

Acting as the brain of the robot, it then translates those images into actions for the gripper to pick the selected product.

Fun Fact: mGrip is food safe and designed to efficiently pick and pack selected foods.











FirstLook
Throwable Robot





Coach: Tom Frost, VP & Manager UGS

Hometown: Teledyne FLIR

Stats: FirstLook is a throwable, rugged, and expandable robot that provides immediate situational awareness with four cameras, performs persistent observation and investigates dangerous and hazardous material while keeping its operator out of harm's way.

The robot climbs small obstacles, overcomes curbs, turns in place and self-rights when flipped over.

Fun Fact: Only 6 lbs, the robot can survive a drop on concrete up to 16 feet.











Skydio 2+ Autonomous Camera Drone





Coach: CEO Adam Bry

Hometown: Skydio

Stats: Skydio 2+ has tracking, navigation and obstacle avoidance while flying and taking 4K cinematic photos and video. It has a range of up to 6km and can fly 39mph. The Beacon allows hands-free flight and a follow feature.

Fun Fact: For short distance flight, you can use your phone to control the drone. Another option is the additional Skydio Controller, which looks like a video game controller.









SUNFLOWER Autonomous Shading System





Coach: CEO Armen Gharabegian

Hometown: ShadeCraft Robotics

Stats: This solar powered and energy storing umbrella tracks the sun to capture optimum energy. It opens with the rising sun, and closes at dusk. With integrated lighting, Wi-Fi, Bluetooth and speakers, it's an all in one solution. The companion app provides feedback from all its sensors in real time.

Fun Fact: This smart robot has obstacle avoidance and will only open when it's safe, and will close in inclement weather.





