iRobot®

Ava™

Mobile Robotics Platform

OVERVIEW

iRobot Ava™ is a breakthrough mobile robotics platform developed to help robot designers, application developers and market innovation specialists expedite the pursuit of practical, affordable mobile robotic solutions.

- **Practical**
- **Easy-to-use**
- **Designed for the real world**

PERFORMANCE ADVANTAGE

Practical

Autonomous navigation for independent, proactive point-to-point navigation.

Functional
The right balance of features and robustness integrated in meaningful and productive ways.

Affordable
A highly accessible development platform for business or consumer applications.

Robust
Comprehensive sensor arrays (laser, sonar, and 2D/3D-imaging) providing complete autonomous navigation.

Easy-To-Use

Intuitive and easy to use controls for natural, non-intrusive user interactions.

Intuitive
Customizable touch, voice, and gestural controls create richer interactions.

Useful
Person-following, height adjustment and other flexible, autonomous behaviors simplify use.

Confident
Deliberate navigation and predictable behaviors inspire trust and confidence.

Designed For The Real World

Real time situational awareness for fast reactions to the complex world we live in.

Safe
Detects and avoids people, objects and hazards such as stairs.

Dynamic
Responds to our human world with smooth yet quick omni-directional movement.

Adaptive
Identifies and reacts to changing environments in real time.
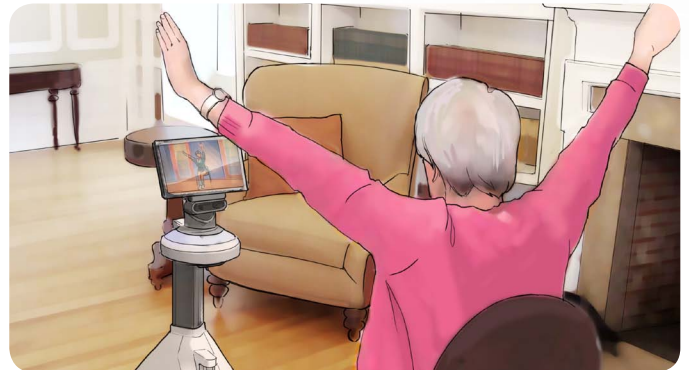
POTENTIAL APPLICATIONS

Collaborative Work

Caregiver Support

Learning

Homecare

Mobile Kiosk

Security

Product Expert Chat

Factory Inspection

INTEGRATED PLATFORM VISION

Aware® 2 Robot Intelligence Software

Software Developers Kit

Remote Access Enabled—with easy-to-use API

Head Agnostic Design—for use with diverse pad devices

Application Accessory Support

WiFi/3G/4G Cellular Connectivity

Advanced Sensor Suite
      Scanning Laser
      Ultrasonic
      2D/3D-Imaging
      Contact Bumpers
      Cliff Sensors

Touch Sensitive "Skins"—for local control

Integration with future pad-based sensors
(e.g. NFC, Barcode scanners, cameras)

Voice-Based Interaction
      Speech Recognition
      Text-to-speech

Autonomous Recharging

Omni-Directional Drive

Adjustable Height Torso

Manipulation

Ava™ VERSATILE PLATFORM

The iRobot Ava™ development platform offers flexibility that supports development of a wide range of applications and accessories.

Head Agnostic Design—for local or remote use (displays, tablets, pads, phones, etc.)

Connectivity Options
(WiFi, Bluetooth, RF, IR, etc.)

User Interface Options
(touch, voice, gesture, person-following, devices, etc.)

On-Board Accessories
(payload, videocon, sensors, actuators, etc.)

Software Application Flexibility
(open APIs using HTTP, Aware® 2 software, etc.)

Ava™ APP DEVELOPMENT AND PARTNERSHIP OPPORTUNITIES

App Development

Software Innovation
Ava is an app ready robot. Imagine writing apps for Ava that run on a tablet connected to the robot. All of the robot specific tasks, such as mapping, planning, navigation, obstacle detection and avoidance and user interaction will be made easy. App developers can focus on what they do best—software innovation. Imagine what you could do.

Product Development

Hardware Innovation
For design teams developing user needs-based products and accessories where Ava's autonomous mobility would provide a performance advantage.

Market Development

Business Innovation
For management teams conceiving next-generation product or service offerings for new and emerging markets.

ABOUT

iRobot designs and builds robots that make a difference.

iRobot was founded in 1990 when Massachusetts Institute of Technology roboticists Colin Angle and Helen Greiner teamed up with their professor Dr. Rodney Brooks with the vision of making practical robots a reality.

In 2010, iRobot generated more than $400 million in revenue and employed more than 500 of the robot industry's top professionals, including mechanical, electrical and software engineers and related support staff. The company has shipped over six million home cleaning robots and 4,000 unmanned vehicles to date. iRobot stock trades on the NASDAQ stock market under the ticker symbol IRBT.

The iRobot corporate headquarters is located in Bedford, Massachusetts.

iRobot Roomba®

iRobot Scooba®

iRobot PackBot®

SUGV

iRobot®

CONTACT

Ava@iRobot.com
www.iRobot.com/Ava