VITIROVER

NEW ROBOT
for
Higher Education and Research

Solar 4WD Connected Professional Autonomous Robot Mower

Study robotics from the real world !

VITIROVER for Higher Education and Research
Real applications adapted to cutting-edge and trendy technical topics for students, based upon an industrial well appreciated robot.

Teachers, Students and researchers can work on multiple subjects based upon the Vitirover for Higher Education and Research : from IA to IoT through Solar Energy or Fog Computing and more.

POSSIBLE SUBJECTS TO STUDY

- IA & Machine Learning
- Programming (from No Code through C++)
- Connectivity, IoT, Fog Computing
- Low Consumption System
- Sensors & Binocular RGB Cameras
- Web Dashboard & SAAS
- Fully loaded Mechatronic
- Renewable Energy / Solar Panel
- Rechargeable and Fixable Batteries
- Best Navigation Management
- Autonomous 4WD Vehicle
- Geolocation (Optimal LIDAR Mapping)
- Rover & Space or Military Applications
- Space Servicing by robots fleets

REAL APPLICATIONS IN REAL MARKETS

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⚡ **ENERGY**	eDF renewables	Rte	enel Green Power
🚆 **TRANSPORT**	SNCF	ADP	🛣️
🍇 **VINEYARDS**	ANGELUS	CHATEAU PALAIS CARDINAL SAINT-EMILION GRAND CRU	CHATEAU Canon-la-Gaffelière GRAND CRU CLASSE
🌾 **ORCHARDS**	Verger de Poisy	SENURA	La Pugère

OUR COLLABORATIVE PLATFORM

Universities are invited to join the Vitirover community around a collaborative platform that gathering the full teachers, students, searchers and professionals community to go deeper into the development of Vitirover features and R&D topics.

Among other things, Vitirover is a very user friendly and fun motivating tool for practical use and learning of programming languages such as C, C++, Python or even simply Scratch Language. The robot allows different navigation strategies to be tested and refined by the use of AI since the robot records plenty of data from its movements. The robot is provided with a basic content that can be developed by the students according to objectives set by the teacher or even according to actual challenges set by the Vitirover company.

LEARNING BY DOING
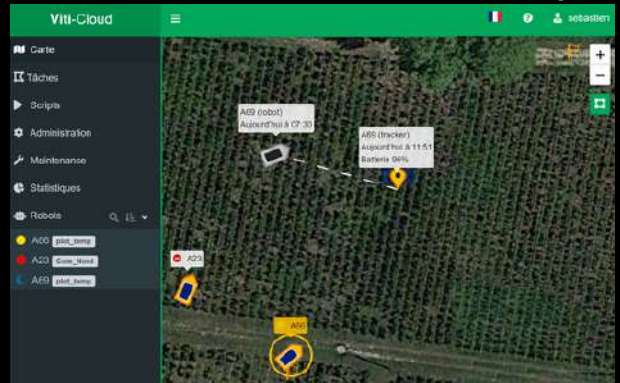
HISTORY

Coming from Vineyards, one of the toughest agricultural environment to maintain because of the density of obstacles, VITIROVER robots have adapted to many other environments.

- 🌱 **ECO-FRIENDLY**
- 🤝 **ESG LEADER**
- 💰 **COST SAVING**
- ⚡ **SOLAR ENERGY**
- 📶 **AUTONOMOUS**

INTERNATIONAL RECOGNITION

SPECIFICATIONS	VR OUTDOOR	VR UNIVERSITY
● DIMENSIONS [cm] (L x W x H)	75 cm x 40 cm x 30 cm	75 cm x 40 cm x 30 cm
● DIMENSIONS [in] (L x W x H)	29"1/2 x 15"3/4 x 11"3/4	29"1/2 x 15"3/4 x 11"3/4
● WEIGHT (kg / lbs)	27 kg - 59 lbs	24 kg - 53 lbs
● CONSUMPTION	1 W/kg - 0.45 W/lb	1 W/kg - 0.45 W/lb
● AUTONOMOUS MOVEMENT	YES	YES
● MAX SPEED	900 m/h - 55 MPH	900 m/h - 55 MPH
● WHEEL DRIVE	4 WD	4 WD
● DRIVE MOTORS	4 (1 per axle)	4 (1 per axle)
● SOUND LEVEL (dBA)	40 dBA	40 dBA
● MAX SLOPE (based upon soil)	15 to 20%	15 to 20%
● WEB BASED DASHBOARD	YES	YES
● CUTTING BLOCK	2 Rotating Grinders	OPTION
● CUTTING HEIGHT (cm / in)	5 to 10 cm - 2" to 4"	-
● CUTTING WIDTH (cm / in)	30 cm - 11"3/4	-
● PRECISION TO OBSTACLE	< 1cm - < 1/2"	-
● FRONT CAMERAS (RGB)	2	2
● INERTIAL SENSOR	IMU	IMU
● POWER SUPPLY	Solar Panel	Solar Panel
● CHARGING DOCK STATION	Solar / Direct	OPTION
● GEOLOCATION (GNSS)	GPS, GLONASS BEIDOU, GALILEO	GPS, GLONASS BEIDOU, GALILEO
● GEOLOCATION (RTK)	YES (License included)	YES (License not included)
● SECURITY GEOLOCATION	Security Battery	Security Battery
● ANTI-THEFT / SAFETY SHUT-OFF	Remote / Lift / Auto	Remote / Lift / Auto
● SAFETY FEATURE	Lift Auto Shut Off	Lift Auto Shut Off
● EMISSIONS (CO2/Chemicals)	0	0
● SOFT DESIGN KIT	-	Protobuf (JSON) via USB
● ROBOT OPERATING SYSTEM	-	ROS2 Compatible
● OPTIONAL SENSORS	-	LIDAR / Ultrasound

Génération ROBOTS