UFR AUTONOMY

UFR Universal Field Robots

OVERVIEW

Corporate innovation strategies are seeking change but are often failing to deliver.

Operators are exposed to changes in laws creating greater responsibility for safety;

Services companies risk competitors being first to market with leading tech capability.

UFR is the robotic automation solution that is delivering:

- accelerated time to market,
- decreased risk of failure, and
- decreased overall cost.

UFR specialises in:

- robust automation,
- proven robotics technology platforms, and
- collaborating for customer success.

The complete autonomy package, including:

- Hardware including the computers, sensors, vision, GPS, IMU, 4G, Position, and LIDAR
- Engineering to integrate components and develop bespoke capabilities,
- Support of Universal Field Robots' robotics engineers to assist in setting up and getting you operating with UFR Autonomy.
- Research and development
- Testing
- Product development
- Operations support

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BENEFITS

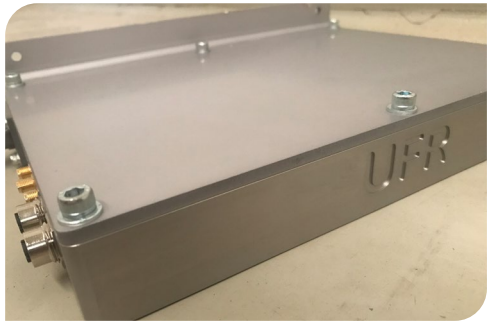
UFR has hardened automated tracked and wheeled platforms working in the field using UFR Autonomy which can lift, lower and position materials.

UFR can complete hardware engineering to integrate a complete package of automation components for R&D, testing, development and operations.

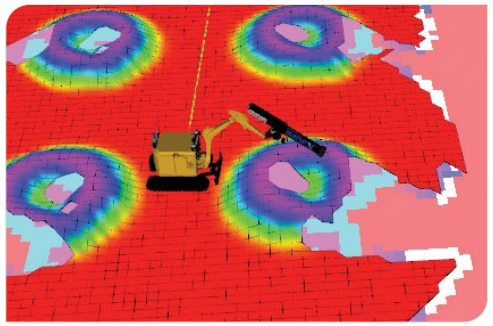
UFR robotics engineers can help with UFR Autonomy, so that you can focus on solving your unique problems, delivering for your customers and making your employees safe.

If you have an idea that needs to be implemented or a burning business platform under you, we can have you up and running with UFR Autonomy in a matter of weeks.

Safety above all



Robust components



Autonomous navigation

Human detection

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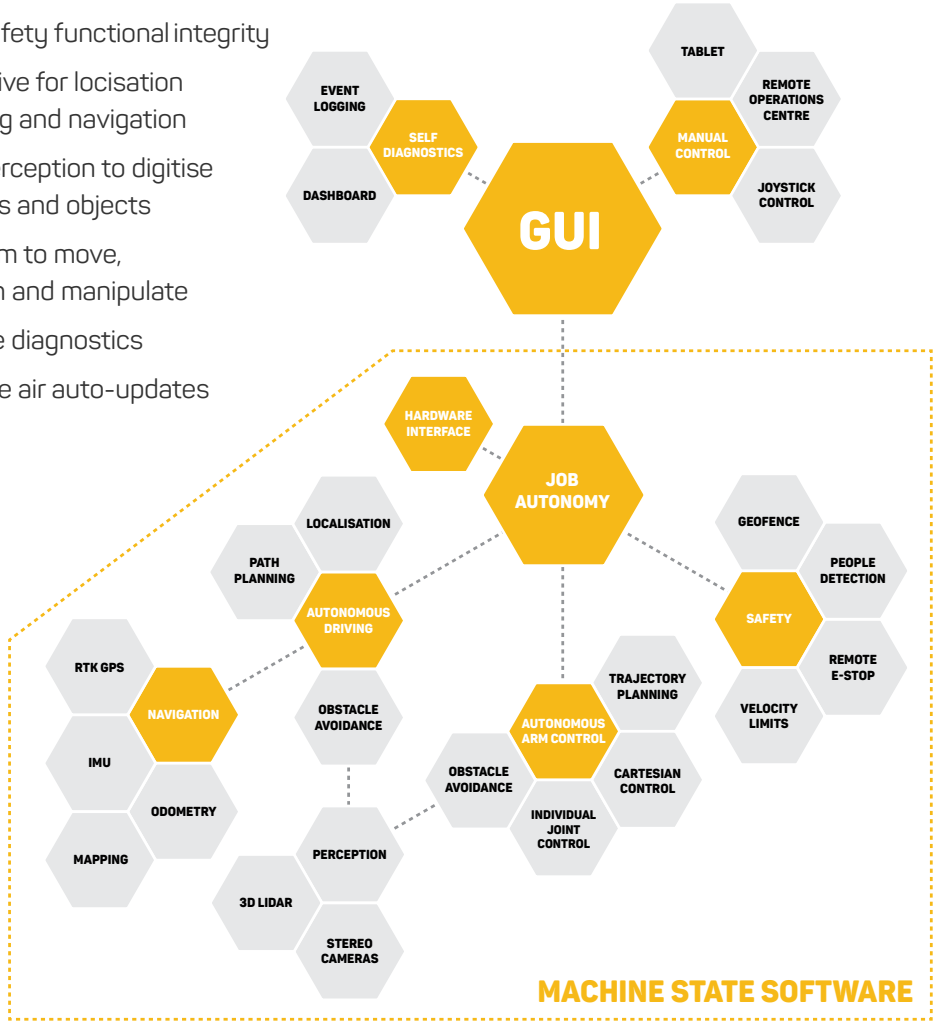
ROBOT SOFTWARE

UFR Autonomy includes:

- User interfaces
- Autonomous mission plans
- UFR Safety functional integrity
- UFR Drive for locisation mapping and navigation
- UFR Perception to digitise features and objects
- UFR Arm to move, position and manipulate
- Remote diagnostics
- Over the air auto-updates



Stereo Camera

Industry leading depth and vision cameras gives the robot an unrivalled view of its environment

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PLATFORM ENGINEERING

Tablet user interface, platform independent.

Map terrain and avoid slopes and obstacles.

Camera view of work zone for remote operation.

Remote computer interface via 4G link or mine site communications.

Accurate GPS using RTK correction signal

Line of site remote control with safety rated joystick controller.

Event and performance reporting to the cloud.

Perception with vision and LiDAR.

Monitoring and remote display of machine health.

Tried-and-tested mechanical platforms, such as excavators or ATVs.

Vision provided people detection for safe stop.

Drive to location by GPS or mapping.

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PLATFORMS

E20C

UFR's E20C is our 2-ton robotic platform that operates UFR Autonomy and can be equipped with attachments to perform a variety of tasks. We collaborated with IMDEX Limited to deliver IMDEX BLAST DOG™, a semiautonomous system that helps optimise blasting based on high-resolution three dimensional material models built from sensor data.

SKID STEER

UFR Loader enables critical tasks to be completed that were previously not possible due to the danger posed to people. The skid steer can be operated remotely or autonomously, ideal for an underground mine environment where machines are often controlled from a surface control room. UFR Loader can also operate in an open autonomy way with existing control systems.

ATV

UFR Deliver uses appropriately sized vehicle platforms, such as ATVs or trucks equipped with UFR Autonomy and directed with our dispatch and scheduling system for delivery of materials and components for the construction and resources sectors.

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CLIENT TESTIMONIAL

Hear what our customers have to say:

Scan this QR Code to watch (youtu.be/-un5zoGFuAQ1)

"It's been very exciting to work with Universal Field Robots on this project and particularly around the speed that we've gone from concept, to the first prototype being field tested inside six months. I think it's a great boon for Queensland's robotics industry going forward."

— John Jackson, Systems Integration Manager

IMDEX

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UFR Universal Field Robots

GET IN TOUCH

We are driven to make the world a safer, more efficient, and sustainable place by building autonomous field robotics packages that work for you.

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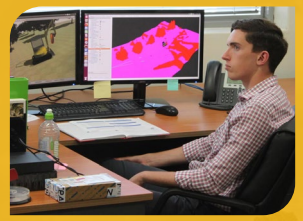

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WORKSHOP

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TEST SITE

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OUR SOCIAL NETWORK