

OEM AUTONOMOUS MOBILITY

OMNISuite Application
Development Stack



ACCELERATE DEPLOYMENT, REDUCE RISK, AND CUT COSTS.

OMNISuite isn't just a software stack—it's a strategic asset. By building on our proven platform, manufacturers and integrators are able to unlock their use case with ease.

The end-to-end real-time software stack for industrial and commercial-grade mobile robots.

Navigating the Modern Mobile Robotic Landscape.

Delivering cutting-edge autonomous mobile robots requires more than just technical know-how. It's a balancing act for system engineers and roboticists.

Developing timelines are shrinking.

The market rewards agility and speed. Years-long R&D cycles for foundational autonomy software are no longer sustainable. A faster, more strategic approach is essential to capture the emerging market.

Safety compliance is non-negotiable.

Compromises on safety are unacceptable. The path to standards certification and regulatory approval relies on operational reliability built into a robust, certified foundation.

Long-term costs demand smarter strategies.

Maintaining and updating complex autonomy software requires significant resources comparatively to COTS solutions available on the market today.

Complexities in operational environments.

As mobile robots shift towards shared or unstructured operational environments, there is a growing challenge for mobile robots to autonomously navigate and maintain safe operation.

Examples of products running OMNISuite



MATERIAL HANDLING

5-week total integration time.



CLEANING

4-week total integration time.



PERSONAL MOBILITY

3-week total integration time.



ENABLING A STRATEGIC ADVANTAGE.

Cyberworks' OMNISuite.

With OMNISuite, you can:

Focus your expertise on differentiation.

Redirect valuable engineering resources from foundational software to build your product's unique applications and core competitive advantages.

Accelerate your path to safety certification.

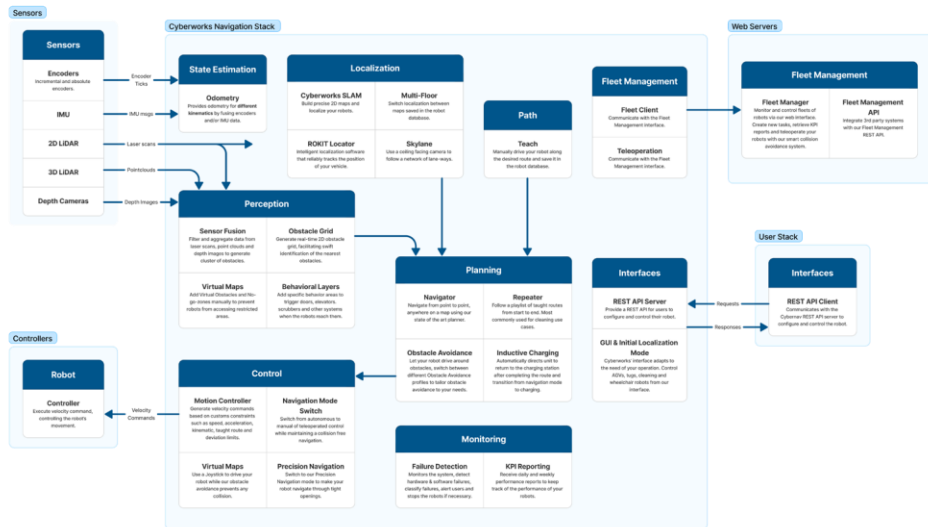
With the path to IEC 61508 and ISO 26262 compliance supported, you can streamline the certification process and deliver safer, more reliable mobile robots to market.

Future-proof your technology investments.

With continuous support and updates, we stay ahead of industry trends, ensuring long-term ROI and reduced maintenance costs.

Build your product with confidence.

You can bring your product to market without having to worry about the foundational software it built on.



FREQUENTLY ASKED QUESTIONS.

01

How Does OMNISuite Eliminate AI Hallucinations & Edge-Cases?

We are the first company to deliver a fully integrated end-to-end autonomous mobility stack designed to operate independently of GPUs. Our architecture leverages a hybrid AI paradigm that fuses deterministic, model-based algorithms with selectively applied machine learning components. This approach mitigates the inherent failure modes of end-to-end ML systems—such as hallucinations and poor handling of long-tail edge cases—by grounding decision-making in mathematically verifiable methods.

By removing GPU dependency, the system achieves high computational efficiency on standard x86 processors and embedded architectures, substantially reducing hardware cost, power draw, and thermal requirements. Machine learning modules are deployed only where statistically robust, ensuring reliable generalization while maintaining bounded resource utilization. The result is a lightweight, scalable solution that delivers real-time autonomous performance without reliance on large-scale acceleration hardware.

02

What is OMNISuite?

All of Cyberworks Robotics' core technological capabilities – including perception, navigation, control, path planning, and fleet management and monitoring – are embedded within our comprehensive platform called OMNISuite. This integrated suite provides OEMs with a single, scalable solution designed

03

Why choose OMNISuite over developing proprietary software?

When you rely on an established platform like OMNISuite, you're effectively standing on the shoulders of a team that has already addressed many of the complex challenges in autonomous robotics—perception, safety, scalability. We help focus your engineering efforts on your unique value rather than reinventing foundational software for autonomous mobile robotics.

04

In what types of environments does OMNISuite perform best?

OMNISuite is designed to excel in unstructured, dynamic environments where robots and humans work side by side. Its flexible perception, navigation, and control modules adapt to changing conditions, obstacles, and unpredictable behaviors, making it ideal for real-world industrial and commercial settings, such as warehouses, logistic centers, hospitals, airports, greenhouses, supermarkets and more. Case studies are available upon request.

05

How does Cyberworks Robotics ensure safety and compliance in deployment?

Our stack operates seamlessly on QNX, a leading safety-certified RTOS in robotics and automotive. Their foundational software supports compliance to IEC 61508 SIL 3 and ISO 26262 ASIL D standards. This integration provides a solid foundation for reducing your certification burden and ensuring reliable operation in safety-critical environments.

UNIQUE FEATURES

Automotive-Grade Safety-Certified OS

Our platform is engineered for industrial- grade safety and reliability, built on platforms supporting critical safety standards such as IEC 61508 SIL 3 and ISO 26262 ASIL D.

Vehicle Agnostic

Supports any vehicle type including Ackerman, differential drive, tricycle, etc.

Application Agnostic

Generalizes to any type of application and use-case including the UI layers.

AI Edge-Case Resilience

Eliminates “hallucinations” and other edge-cases often associated with AI systems.

SLAM-Denied Areas

Novel localization technology for areas where SLAM is unable to achieve loop-closures.

X86 Hardware

No GPU acceleration needed—ultra low-cost production.

Ultra-Low-Latency Code

Realtime performance in even the most demanding conditions.

End-to-End

No code development required.

Advanced Realtime Diagnostics and Safety

Blackbox recorder for Auto-Recovery for continuous operation without intervention.

REST API and Customizable UI for Unique User Experience

Interface to existing external software systems or customize your user-experience with ease.

Industrial Grade Navigation

Navigates in crowds, narrow spaces, etc.

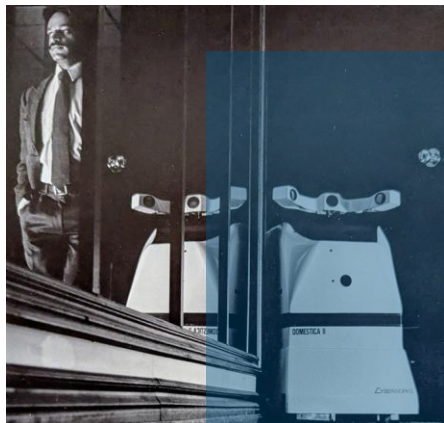


ABOUT US

Why choose Cyberworks Robotics?

A leading provider of turnkey autonomy software solutions dedicated to enabling rapid, reliable, and safe deployment of mobile robots. Founded with the mission to accelerate the adoption of autonomous technologies, we deliver a comprehensive, off-the-shelf software portfolio that integrates software designed for OEMs building next-generation mobile systems.

At Cyberworks, we are committed to innovation, quality, and partnership, helping our clients stay ahead in the rapidly evolving landscape of autonomous mobility.



1984: Cyberworks Robotics' founder with the world's first fully autonomous industrial mobile robot – as reported in the New York Times.



A Total Solution

Stress-Free Automation, Custom-Fit

Cyberworks delivers a full-service robotics solution—covering every application use-case. OEMs can add their own UI/UX features and styling for a distinctive feel.

White Glove Experience

Our application stack is backed by one of the world's most experienced autonomous mobility engineering teams dating back to 1980s. Safety compliance is non-negotiable.

TRUSTED BY THE WORLD'S LEADING BRANDS

BlackBerry

DELL



SUMITOMO

ASUS



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