

# PANEL MEMBER

---

Don Lefevé

Vice President of Corporate Affairs

RRAI Robotic Research

[dlefeve@roboticresearch.com](mailto:dlefeve@roboticresearch.com)





# Vehicle Autonomy For Complex Environments



# About RRAI

20 YEARS OF AUTONOMY LEADERSHIP

DUAL USE TECHNOLOGY FOR  
COMMERCIAL AND DEFENSE

FOCUSED ON OFF-ROAD/ON-ROAD  
OPPORTUNITIES



# Drayage, Logistics & Distribution



---

## RRAI's "Whole Yard" Perspective

Long-term customer value and overall AV adoption are best-served by a future-state focus on transportation and logistics.

Addressing hard-to-automate tasks alongside vehicle autonomy enables maximum seamlessness in yard operations and yard management, including coordinated control of tasks and systems such as doors, lights, gladhands, smart trailers and more.

---

RRAI has demonstrated success in navigating complex mixed-use yards while maintaining throughput equivalent of human operators.

In 2023, we're scaling to more distribution centers and intermodal terminals. We are targeting 100+ yard truck deployments in 2024.

# Drayage, Logistics & Distribution



Click to Play



## First/Last-Mile Industry Examples

Yards/Terminals

Drayage

Warehousing

Cross-Docks

Long-Haul Trucking

Freight Rail Yards

Ports

## Core Features/Functionality

- Move without trailer
- Hitch/Move with trailer
- Dock trailer
- Landing
- Unhitch trailer
- Sense and avoid traffic and people
- Predict path of moving objects
- Plan routes/reroutes
- Park trailer at dock
- Yard Management System integration

## Features/Functionality In Development

- Pedestrian detection/classification
- Trailer angle capture improvements
- Dynamic lane planning
- PreDock planner
- Pallet detection
- Curb detection

# Heavy Industry



## Relevant Industry Examples

- Forestry
- Oil & Gas
- Aggregates
- Construction
- Industrial Agriculture

