

atai

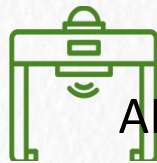
ATAI's vision solutions in the field, globally



 **3**
Continents

 **150+**
Engineers

 **20+**
Patents

 **150+**
AI Gates Installed

 **250K+**
Rail Wagons
Processed

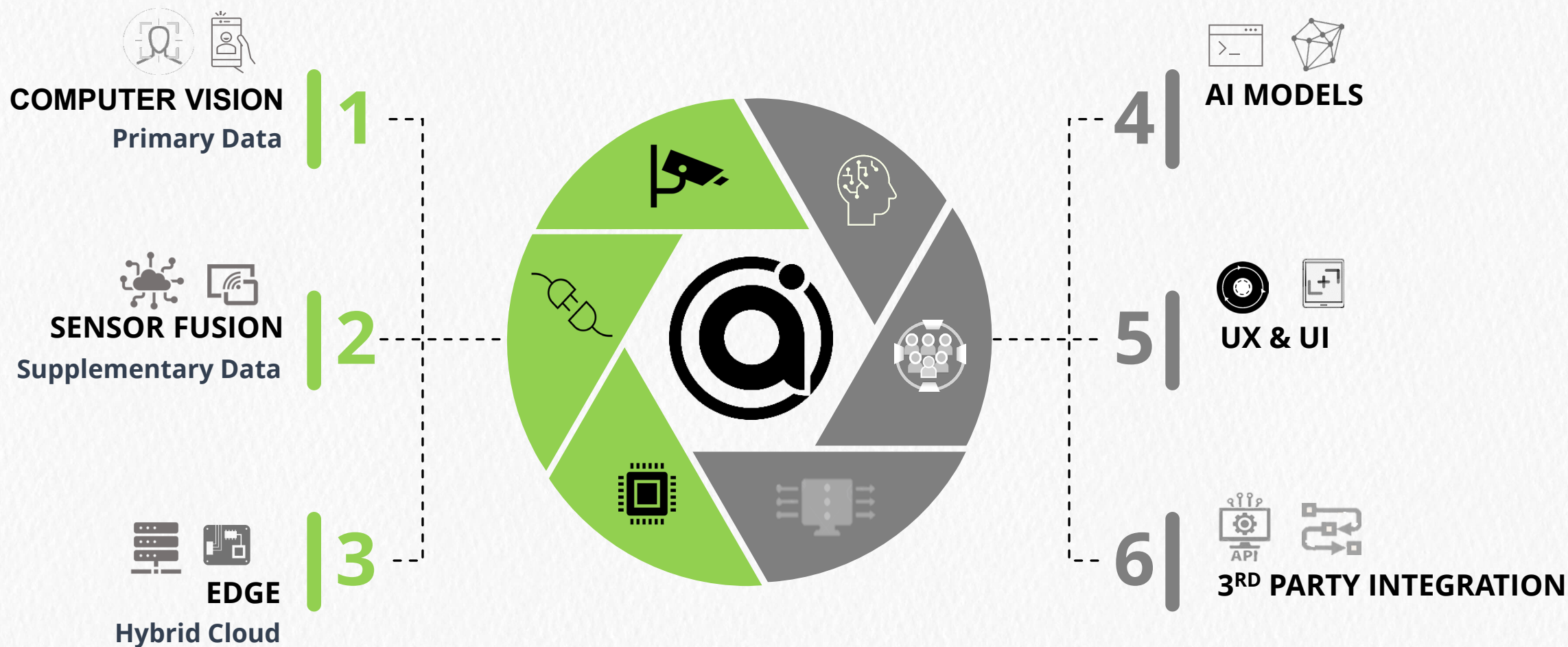
 **500K+**
Truck Gates
Processed

 **3M+**
Container
Moves Tracked

 **20M+**
Ex-Im Cycles
Processed

 **40M+**
Tons
Cargo Handled

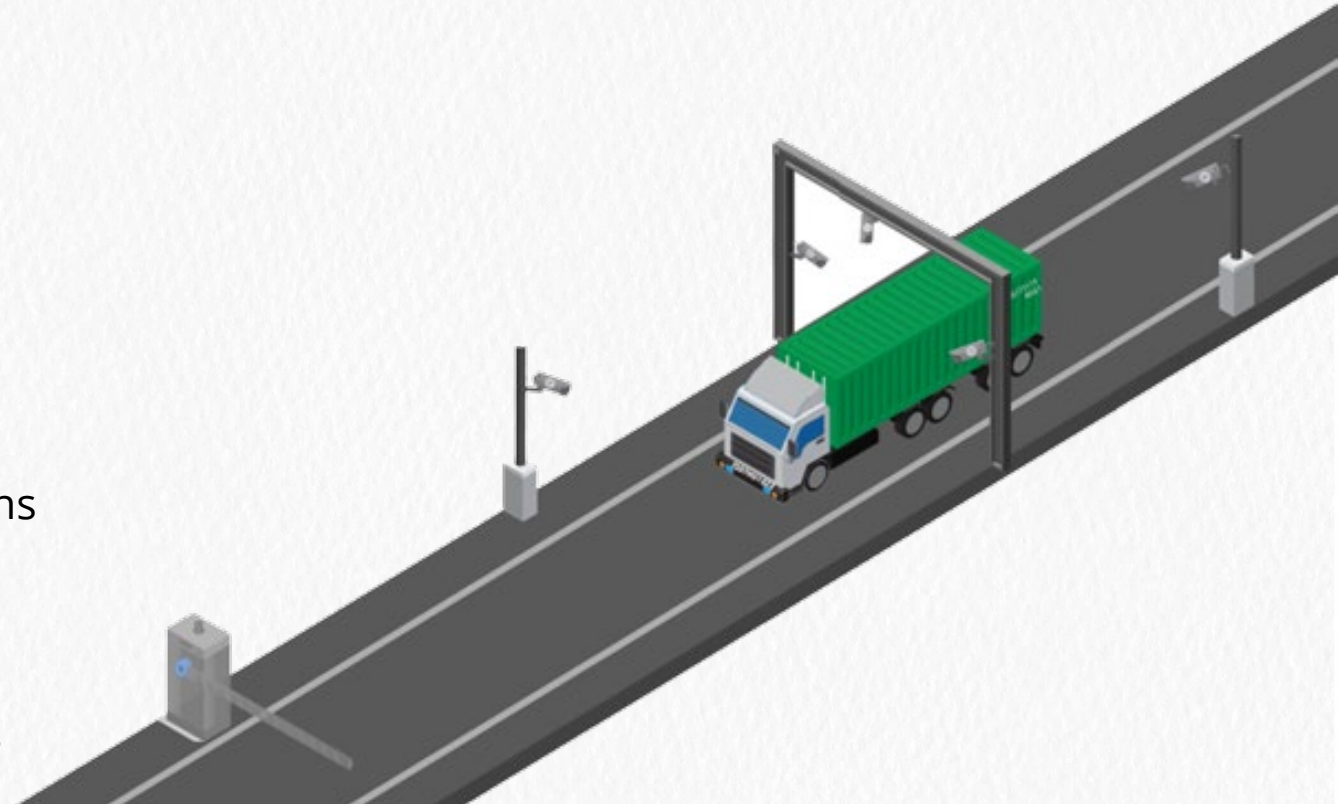
Driving Technology



ATGATE – SOLUTION OVERVIEW



- A deep learning based multi modular redundant solution to capture truck and container details using deep learning AI and Video analytics in real time
- Automatic capture of truck and container (ISO/Semi-trailer/intermodal) details
 - Container number and type
 - IMO class from all possible sides
 - Seal presence
 - Supports twin containers
 - Truck license plate number
 - Container damage detection
 - Supports RFID/FASTag
- Fully functional GOS (Gate Operating System) to
 - Manage various gate processes including integrated exception handling system
 - Controls the gating controls and instrumentations
- Interact with the TOS to complete the operational transaction as per the operational procedures
- Evidence backed operations in all weather conditions



ATDAMAGE – FEATURE OVERVIEW



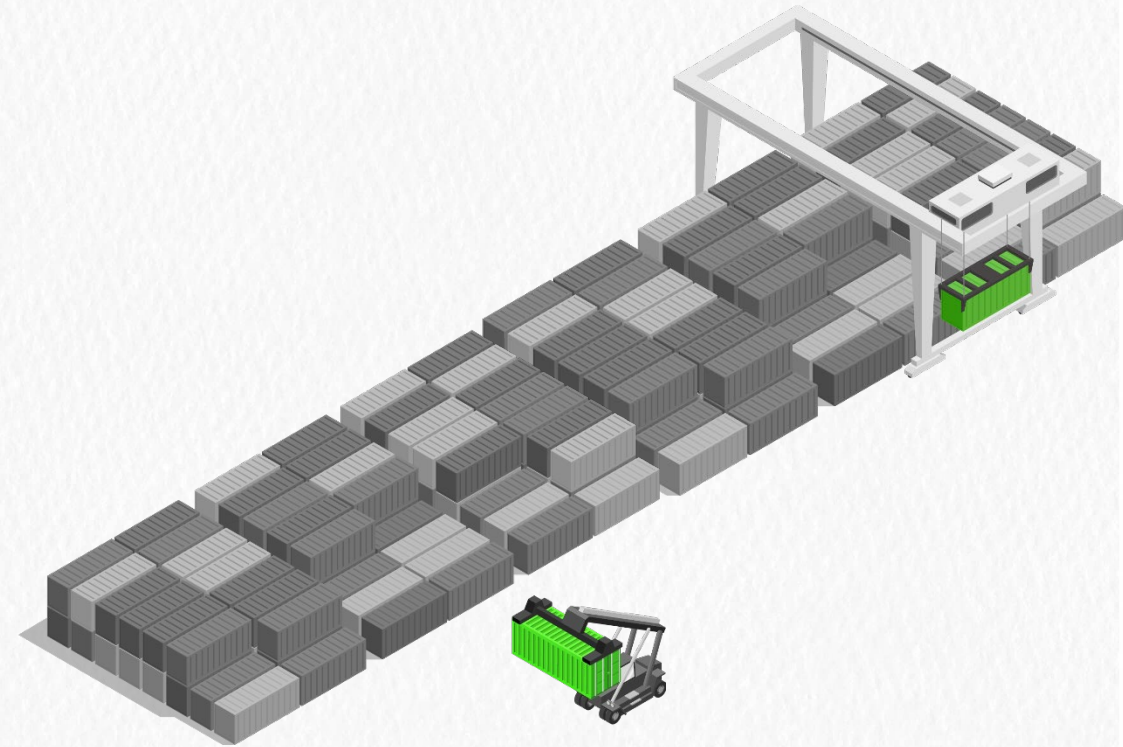
- A customized automatic damage detection and alerting system
- Supports damage detection during Gate, Rail and Quay operations
- Automatic capture of container damage includes
 - Corner post damages
 - Cut-Hole damages
 - Major and minor rust damages
 - Surface scratch damages
 - Surface welding detection
 - Major and minor dent, bulge and bend damages
 - Patch detection on intermodal containers
 - Can be trained for any other specific visible damages as per business requirement
- Real time damage detection while passing through the vision scanner
 - <10 Sec after the last frame is captured
 - No operational downtime needed
 - **Training focused to minimize miss rate (False negatives)**
- Supports twin containers
- Evidence backed operations in all weather conditions



ATLOCATION – SOLUTION OVERVIEW



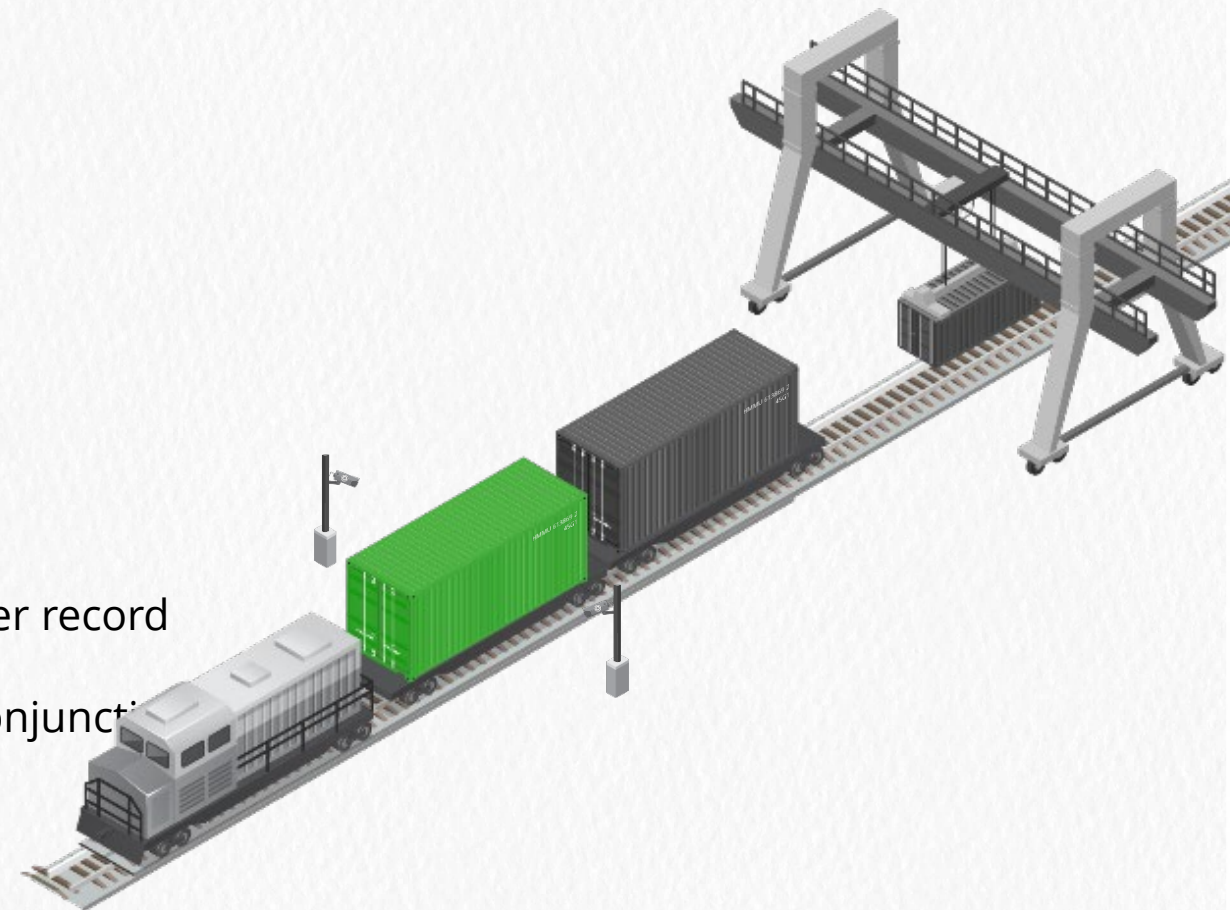
- A container handling equipment agnostic solution to capture container and its exact location details using deep learning AI, Video analytics and sensor fusion technology in real time.
- Supports all types of container handling equipment (CHE) without accessing crane PLCs.
- Crane Vision powered by sensor fusion technology automatically captures container details
 - Container number
 - Container location in localized yard location dictionary
 - CHE ID and Prime mover/ITV (Internal transport vehicle) IDs
 - CHE location and tracking; Prime mover tracking (add-on)
 - CHE navigation (add-on)
 - Digital mapping of a yard
- Fully functional COS (Crane Operating System) to
 - Automatically track the container in the yard
 - Provide navigation information to CHEs
 - Integrate with TOS to help allocate best fit CHEs and prime movers for optimized and efficient operations



ATRAIL – SOLUTION OVERVIEW



- A computer vision solution to capture wagon and container details using deep learning AI and Video analytics in real time
- Supports double stacked rail
- Automatic capture of wagon and container (ISO/Semi-trailer/intermodal) details
 - Container number and ISO code
 - IMO class from all possible sides
 - Track Identifier in case of multi siding rail terminal
 - Wagon numbers, wagon types and wagon position
 - Wagon to Container mapping
 - Seal presence
 - Container damage detection
 - Virtual Gate support
 - Double stack support
- Fully functional ROS (Rail Operating System) to
 - Generate automatic Rail-in and Rail-out wagon transfer record (WTR) reports
 - Manage automatic rail-in and rail-out operations in conjunction with yard module
- Supports shunting and halting operations





ATRAIL – DEMO