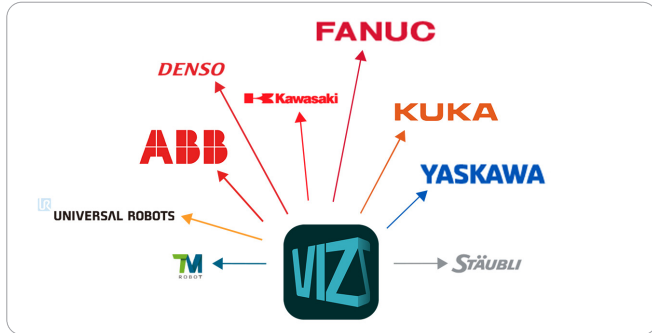


Mech-Viz Robot Programming Software

Robust built-in algorithms
Seamless integration with robots
Designed for bin picking and multi-pick (de)palletizing

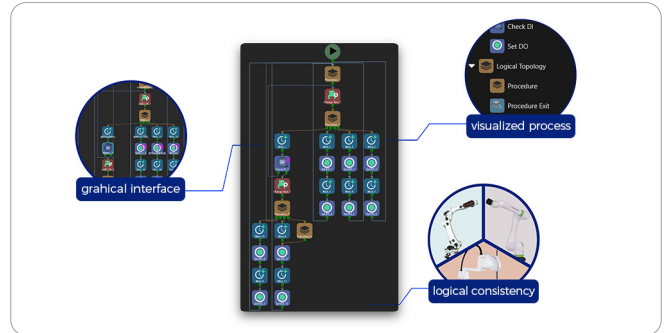
Explore the benefits of Mech-Viz

Mech-Viz is the next-generation robot programming software featuring a visual, codeless programming interface. This software realizes one-click simulation and optimizes the robot performance in real-world tasks. The built-in algorithms, such as path planning, collision detection, and grasping planning, allow for more stable and reliable robot performance in bin picking, machine tending, multi-pick (de)palletizing, and other demanding applications.



Unified programming languages

Users don't need to learn or switch between programming languages for different robot brands, simplifying the user experience.



No-code user interface

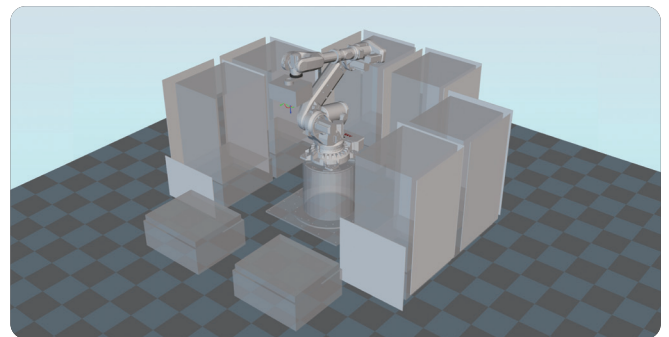
Mech-Viz adopts a flowchart interface to build your applications easily and quickly. You just need to drag and connect function modules that make robot programming more intuitive and understandable.

7 categories 43 common functions

- robotic motion control
- vision system integrating and result processing
- DIDO control
- logical topology
- pick and place
- program execution status control
- tool

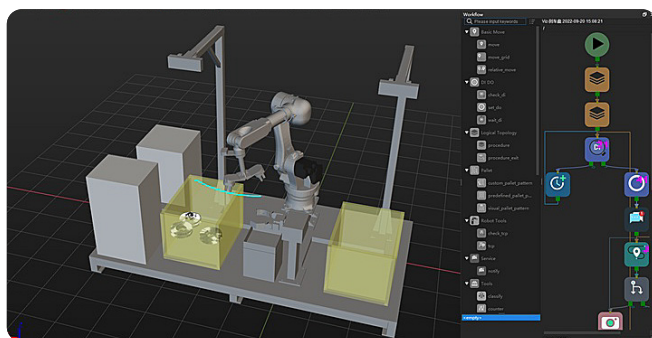
Complete functions

With versatile programming modules, such as motion control, vision system communications, and result processing, Mech-Viz is ideal to solve complex industrial applications.



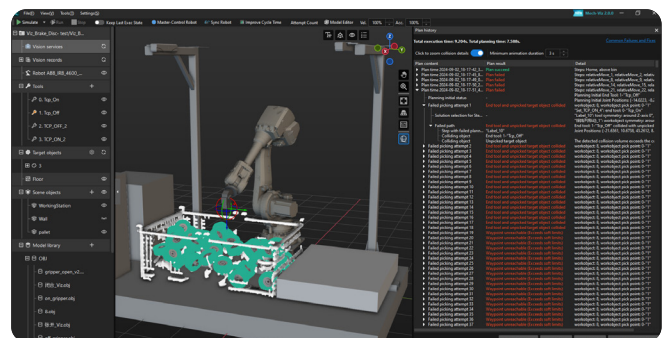
Scene construction

Mech-Viz enables users to construct scene models in a 1:1 scale, allowing for efficient robotic path planning and collision avoidance.



One-click simulation

With a single click, you can simulate robot movements and interactions with the environment before actual implementation. The function enables you to test and observe robot control logic and behavior in various scenarios.



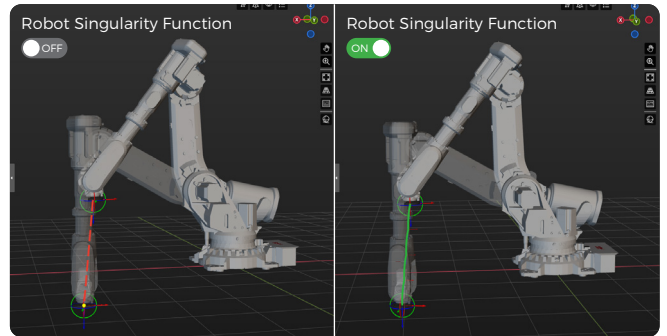
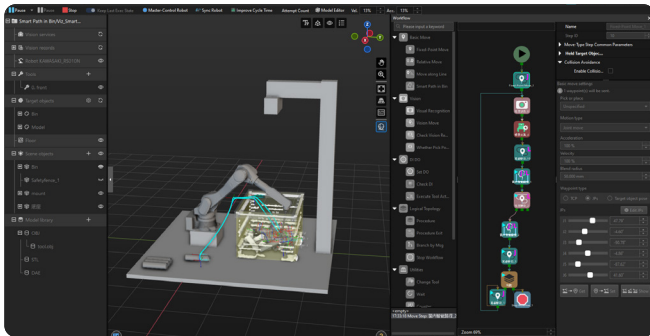
Issue tracking

Via the planning and runtime logs, you can track the behavior and optimize the performance of robots in simulated and real-world environments.

Smart built-in algorithms for complex applications

Path planning

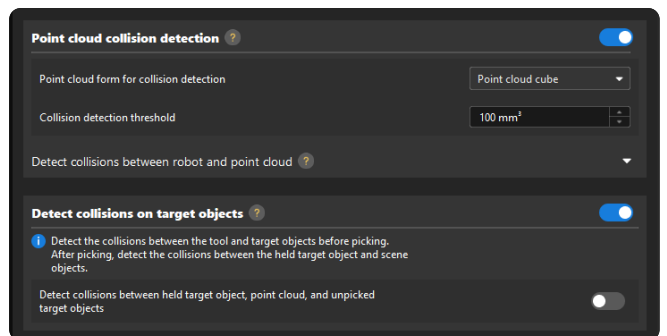
Driven by the intelligent singularity avoidance, in-and-out bin strategy and path planning algorithms, the vision system can predict the potential collision and optimize the motion trajectory of robots, which allows for more stable operation in bin picking and other complex robotic applications.



Collision detection

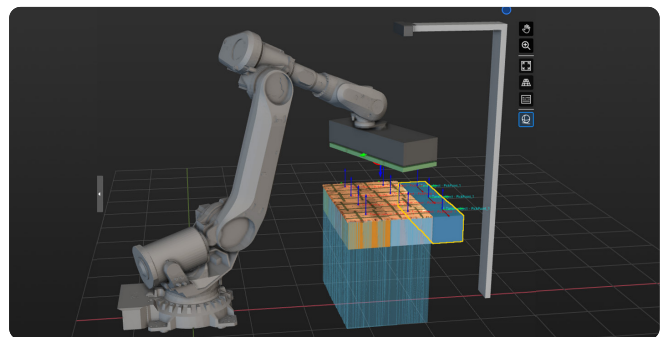
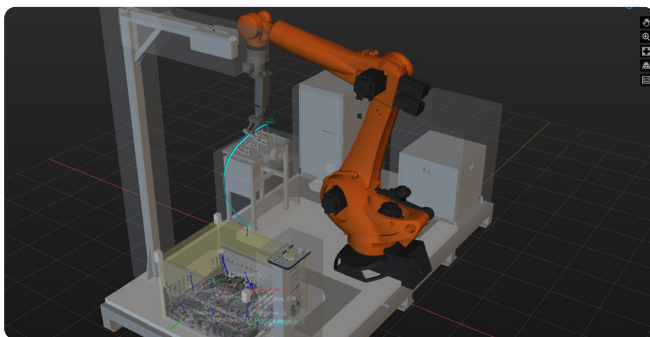
Mech-Viz is equipped with a user-friendly interface for easy parameter adjustment. You can quickly complete collision detection configuration to reduce the risky collisions between the robot and its surroundings.

Check collision detection configuration				Legend
	Point cloud	Unpicked target objects	Scene objects	
Tool	5 mm ³	5 mm ³	Detect by default. No need to configure	✓
Robot links	5 mm ³	Detection is enabled	Detect by default. No need to configure	✓
Held workobject(s)	200 mm ³	200 mm ³	Detection is enabled	✓



Grasping planning

The built-in grasping planning algorithm allows the robot to handle multiple grasping points and multiple tool center points (TCP), making it easy to tackle challenges in deep bin picking and multi-pick (de)palletizing.

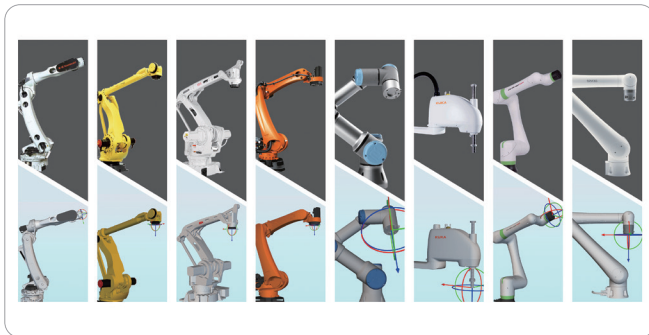


Seamless integration with robots



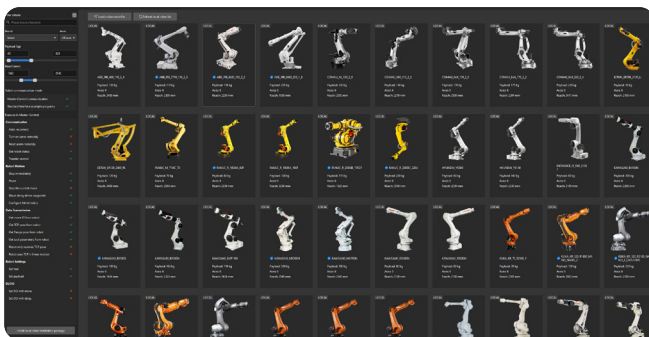
Easy communications

Mech-Viz supports the communications with robots of major brands through standard interfaces such as TCP/IP Socket, Siemens PLC Snap7, PROFINET, and EtherNet/IP.



Various types supported

Mech-Viz supports industrial robots, collaborative robots, SCARA robots, palletizing robots and other common robots.



Rich robot library

More than 1,000 models are available in the robot library. Users are allowed to download and install the models online and offline.

3D VISION & AI FOR ROBOTS AND MORE



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