AUGMENTUS
ROBOTICS SIMPLIFIED

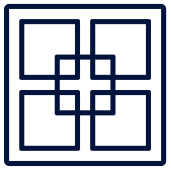
Program Robots In Minutes

The easiest and fastest way to program industrial robots

Contents

Key Industrial Challenges

With the ever-advancing technology, robotic capabilities have been making the headlines now more than ever. Many tried to adopt the shift towards automation but faced obstacles of high costs, fragmented solutions and lack of expertise.



Heavy Fragmentation
Custom project-based solutions are developed by system integrators due to fragmented modules.

High Expertise Required
Different robots operate on different programming languages, requiring proficient and specialised experts.

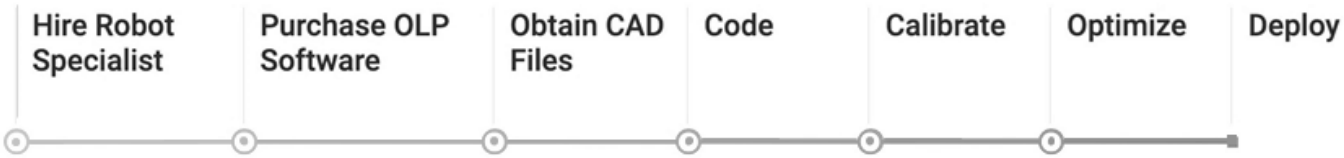
High Cost
Up to 75% of the lifetime costs of each robot are software and programming related.

High Downtime
Downtime of up to 3 weeks could be experienced while reprogramming for a single component change.

Your Ideal Robotics Platform

For the future success of businesses, the Augmentus platform is a smart solution for the challenge. Augmentus is an AI-robot programming platform used by the world's leading robotics and advanced manufacturing companies. We offer a no-code and fully integrated programming software that enables anyone, even those with no robotic experience, to program dynamic industrial robots in minutes.

Traditional Way



The Augmentus Advantage

With Augmentus' AI-robotics platform, companies have experienced:

70%
COST SAVINGS
for employee training & hiring

17x
FATER PROGRAMMING
than conventional programming

10x
FATER DEPLOYMENT
as operators learn in minutes with no experience needed

Applications

Automate with the Augmentus platform

Spraying
Produce faster, consistent and superior finishes while protecting employees from hazardous contaminants

Welding
Overcome the barrier of limited pools of skilled welders and operate high quality weld outputs

Machine Tending
Automate your lathe, mill, stamp press, or 3D printer loading and unloading with short implementation time

Polishing
Enhance post-production processes by automating sanding and polishing treatments for rapid and high-quality outputs

Pick and Place
Loading and unloading machines, palletizing parts in a grid, removing bulk material from boxes with camera support and much more.

Inspection
Increase inspection rates to reliably deliver quality parts. Run your QAQC processes 24/7 while eliminating non-conforming parts from getting through.

Easy and Rapid Industrial Robot Pro

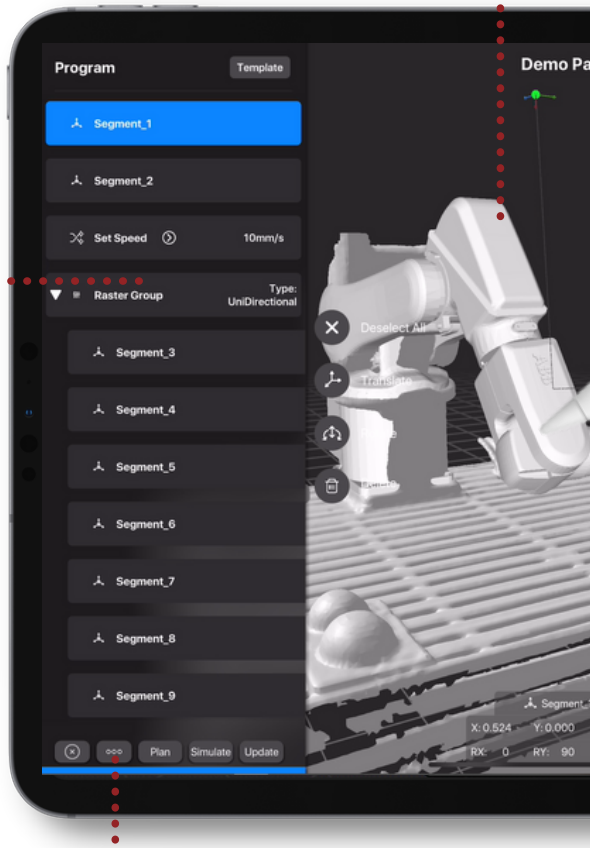
One Platform, Any Brand

Program different robot brands, sensors, end-effectors, and equipments through our unified tablet interface.

and more...

Robot Path Templates

Instantly generate robot waypoints and paths by selecting from our library of pre-designed robot path templates.



Integrated AI Builder

Easily annotate datasets, train and build AI inference models to program intelligent robots that see the world in 3D for dynamic automation.

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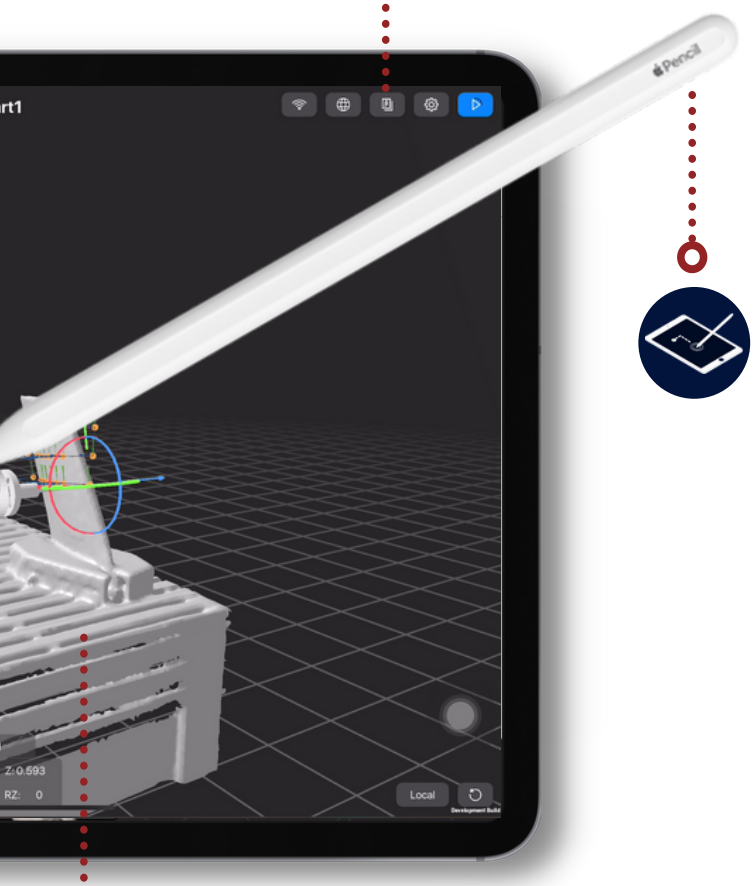
Robot code output

Robot code is auto-generated in its respective programming language (e.g. RAPID, UR-Script, Karel) for rapid deployment, editing and reviewing.



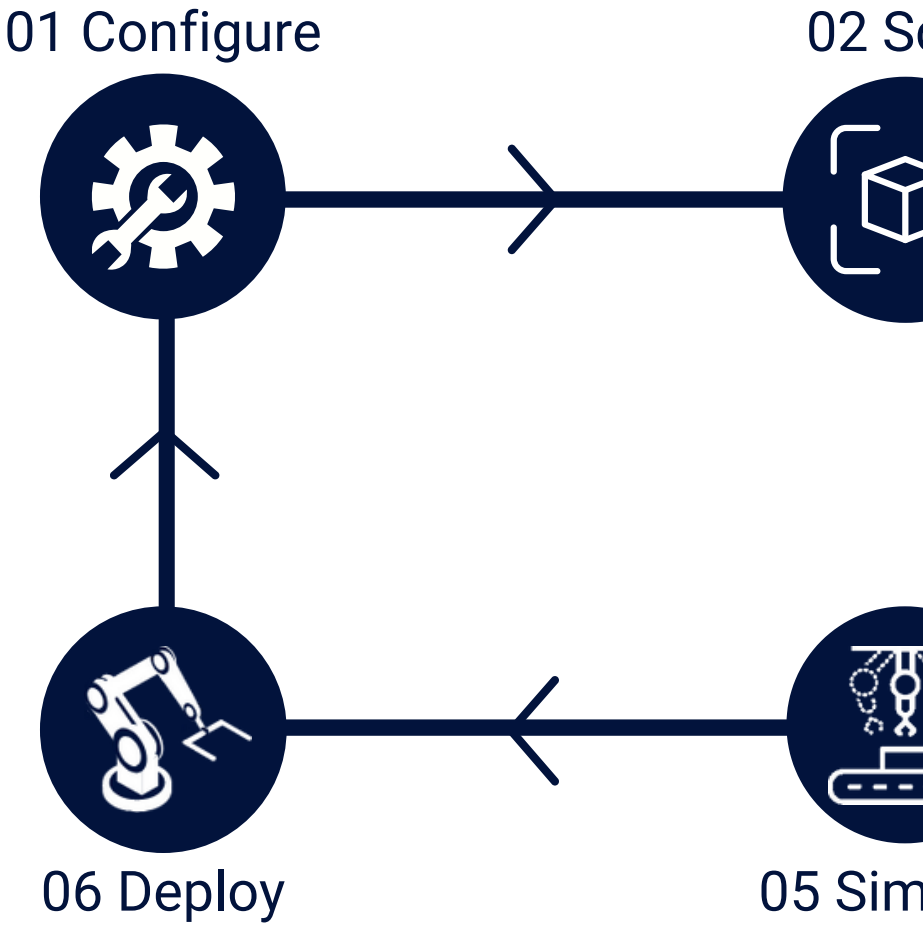
No code Programming UI

Accurately plot waypoints with a touch of a pencil while our algorithm auto-optimizes robot motion.

Scan and calibrate in seconds

Users can scan the work cell using their desired sensor, and calibrate robot and virtual environment in under 30 seconds through our one-click calibration process.

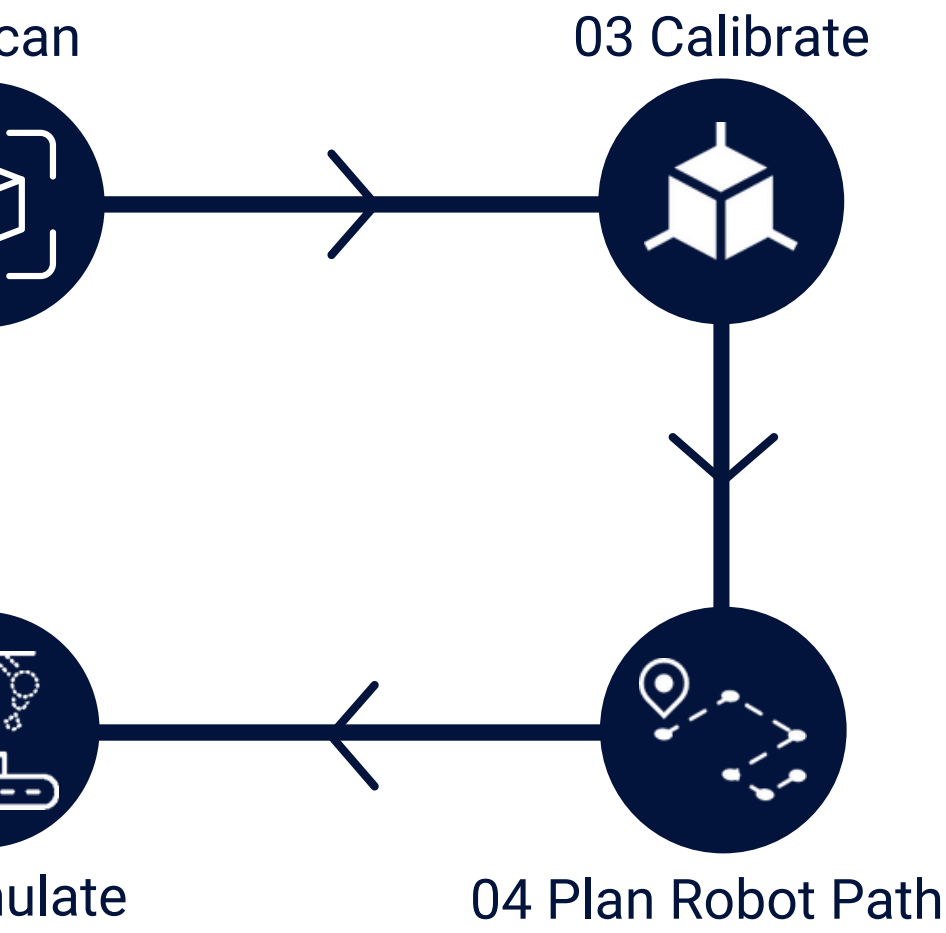
Robot Teaching in 6 Steps



01 Configure
any combination of robot and tools

02 Scan
robot workcell

03 Auto-Calibrate
robot and simulation environment in seconds



04 Plan Robot Path
without coding

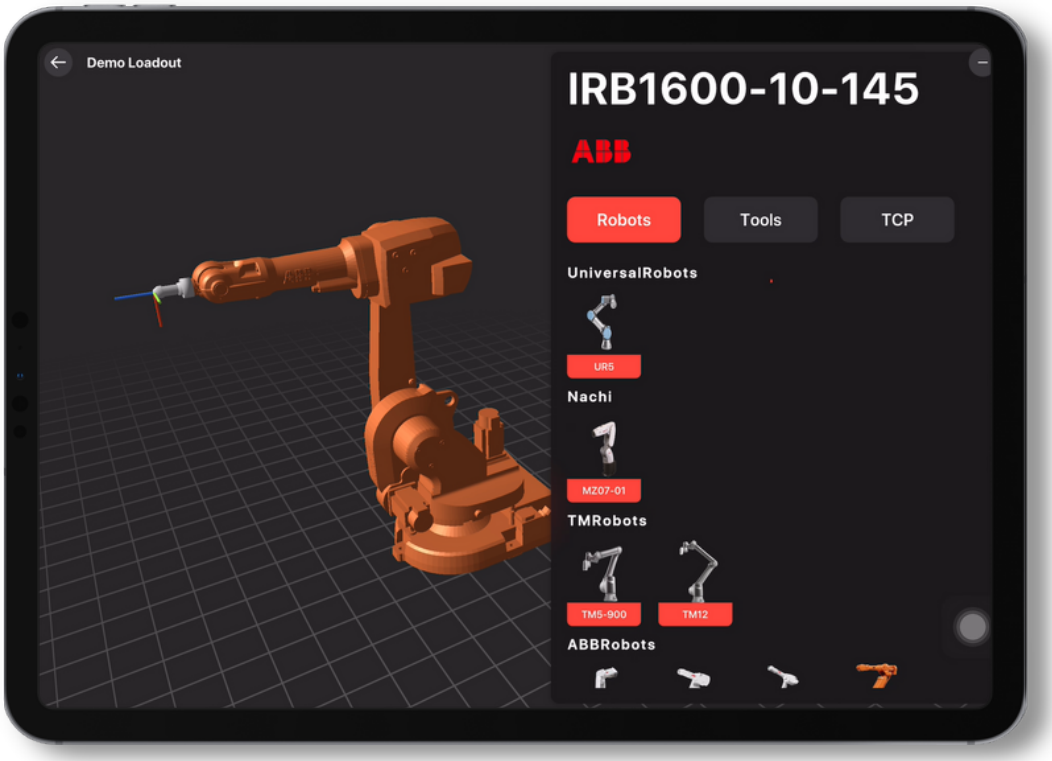
05 Simulate
robot motion with cycle-time calculations

06 Deploy
with robot-specific code output

Step 1: Configure

From a single platform, program industrial and collaborative robots from the top brands, and configure your robot setup seamlessly using a unified and graphical interface. An endless combination of tools is available to create customized solutions that best suit your process needs.

Augmentus continuously updates its platform to support more robot brands and models.



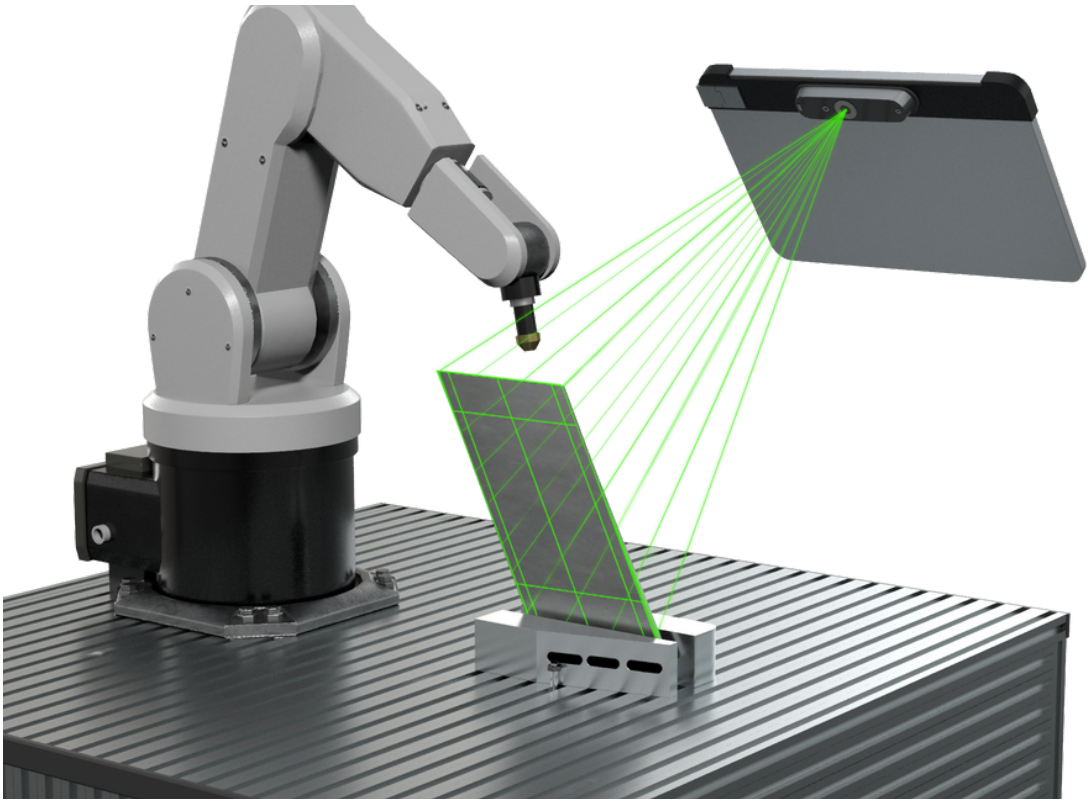
Benefits

- Hardware Agnostic
- Using a unified platform, control any robot for any application

Step 2: Scan

Work cell can either be scanned using sensors to create instant 3D meshes or import CAD files to generate an interactive simulation environment. The cell does not need to be rescanned unless there is a part change or additional objects added into environment.

No further hardware setup is also required and the scanned mesh can be exported as obj files to be used outside of the Augmentus Platform.



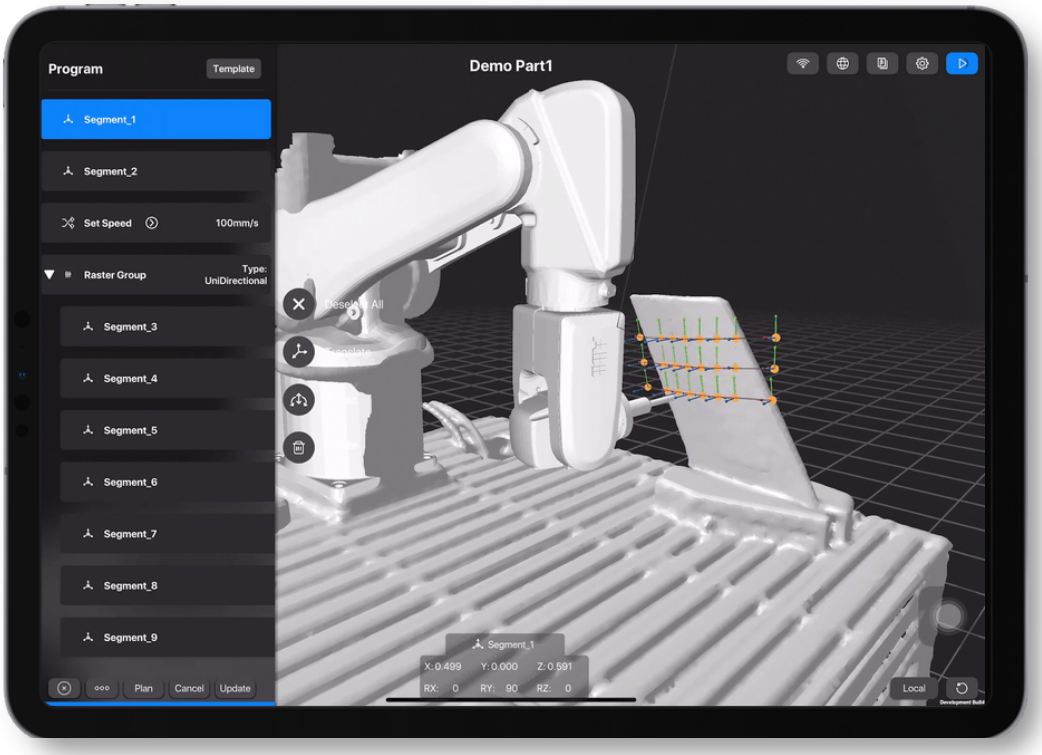
Benefits

- No CAD or elaborate hardware setups required
- Creation of digital twin in a matter of seconds
- Transferrable use of obj files

Step 3: Plan robot path

With an intuitive and graphical interface, you simply plot desired robot waypoints and our platform will calculate and instantly generate a path that accounts for singularity, reachability, and collision avoidance.

No coding is required with our click-and-drop interface. Save frequently used paths as templates, allowing for minimal touch-up upon creation of new projects.



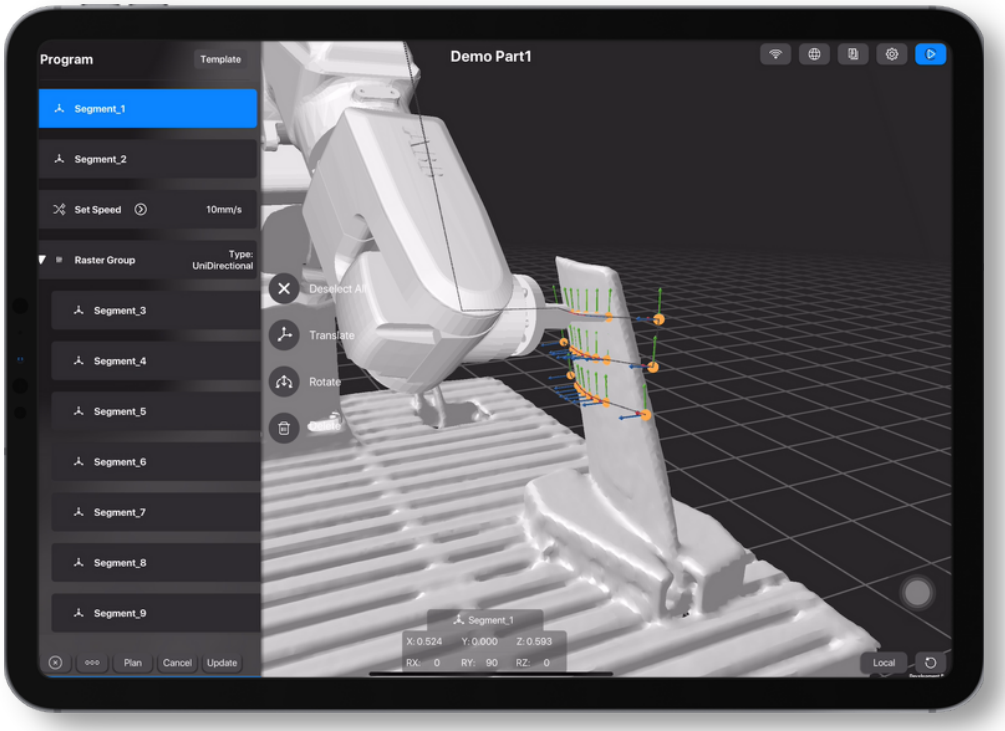
Benefits

- No coding required, simple waypoints plotting
- Singularity-free, reachability-free and collision avoidance
- Save frequently used path as templates
- Easily transfer projects between different robots by selecting the same template

Step 4: Simulate

Simulating planned robot motion prior to deployment would ensure that advanced control algorithms are operating correctly before moving them onto a real robot. All errors are visualized and colour coded. Easy fine-tuning, adjustment of robot motion and projection areas.

The production process also remains uninterrupted and the platform reflects accurate cycle time calculations to compute ROI.



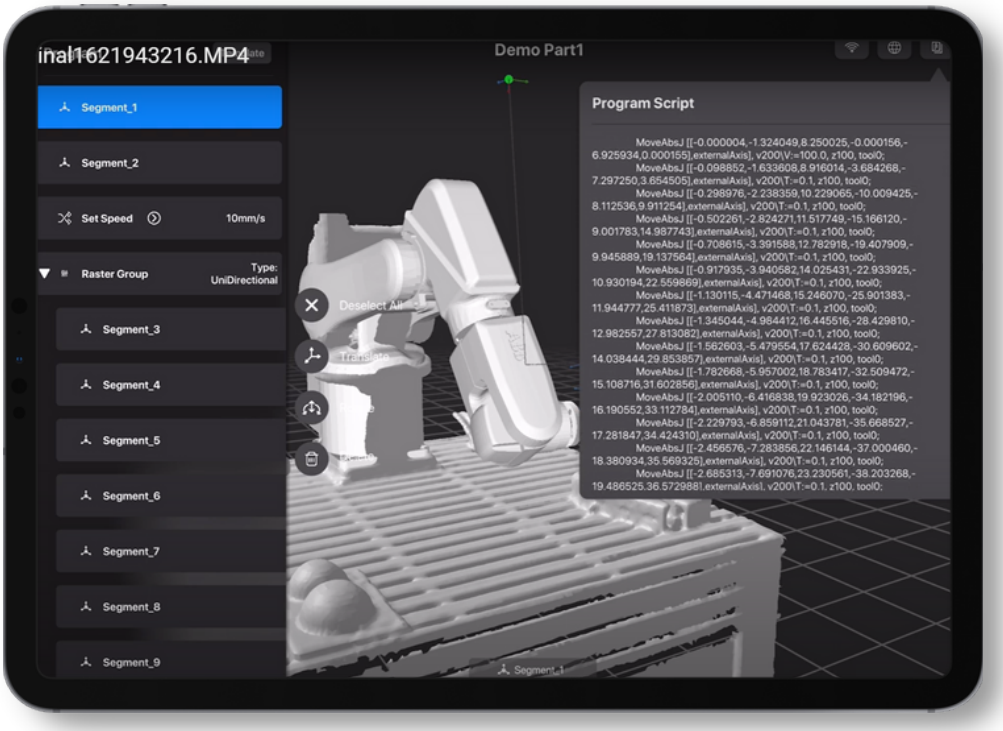
Benefits

- Easy ROI calculation with accurate cycle time
- Easy adjustment of robot motion
- Observe complete robot pathways outside the production environment
- Reduces downtime required for robot programming

Step 5: Deploy

Generated robot scripts in their respective programming language are ready to be transferred to the controller upon deployment. Manual editing to the script for further fine-tuning is also possible.

Generated codes can also be easily transferred to another robot of the same brand across different teams and locations.



Benefits

- Export programs to your robot in the respective programming language
- Share generated programs with anyone
- Possible manual adjustments to the code

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