



ROBPOD STUDIO



Robpod studio is an integrated development environment for collaborative robotics applications based on PyCharm platform.

FEATURES:



Advanced Scripting



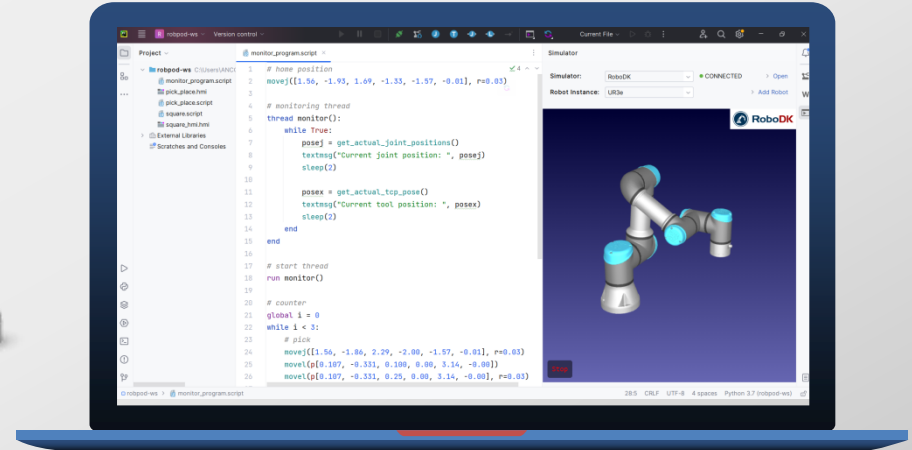
File Transfer & Programs Synchronization



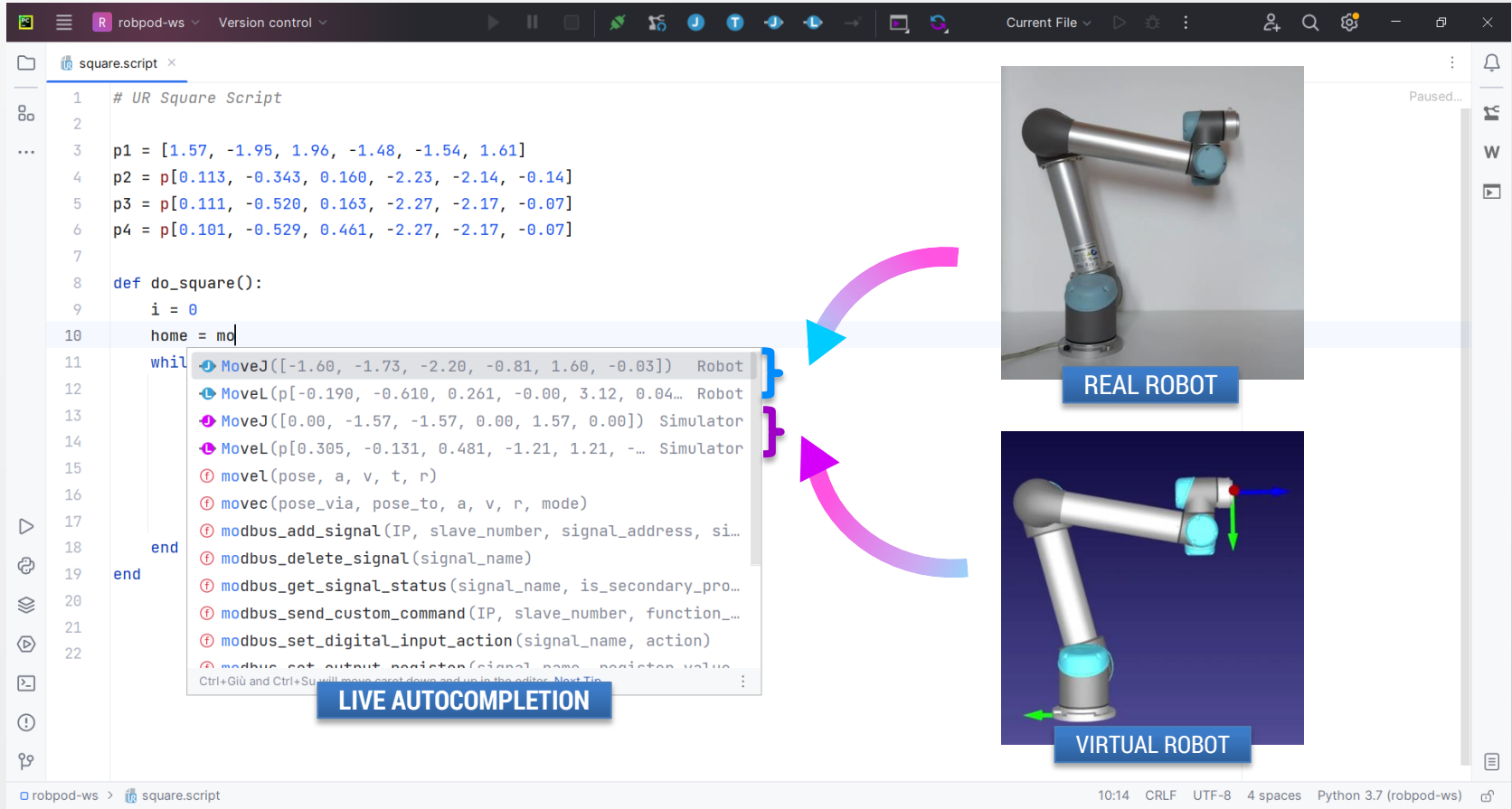
Off-line Simulation and Programming



HMI Designer



Robpod studio makes Universal Robots scripting fast, easy and flexible.



The screenshot displays the Robpod Studio IDE interface. The main editor shows a Python script named `square.script` with the following code:

```
1 # UR Square Script
2
3 p1 = [1.57, -1.95, 1.96, -1.48, -1.54, 1.61]
4 p2 = p[0.113, -0.343, 0.160, -2.23, -2.14, -0.14]
5 p3 = p[0.111, -0.520, 0.163, -2.27, -2.17, -0.07]
6 p4 = p[0.101, -0.529, 0.461, -2.27, -2.17, -0.07]
7
8 def do_square():
9     i = 0
10    home = mo
11    while
12
13
14
15
16
17
18    end
19    end
20
21
22
```

At line 10, the text `home = mo` is partially entered, and a dropdown menu for live autocomplete is visible. The suggestions include:

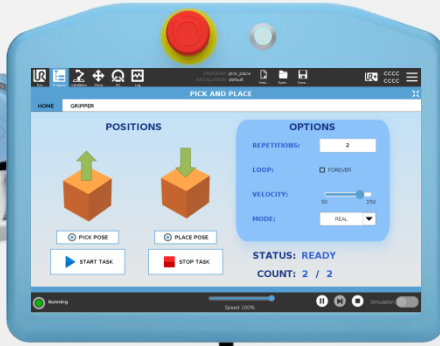
- `MoveJ([-1.60, -1.73, -2.20, -0.81, 1.60, -0.03]) Robot`
- `MoveL(p[-0.190, -0.610, 0.261, -0.00, 3.12, 0.04... Robot`
- `MoveJ([0.00, -1.57, -1.57, 0.00, 1.57, 0.00]) Simulator`
- `MoveL(p[0.305, -0.131, 0.481, -1.21, 1.21, -... Simulator`
- `moveL(pose, a, v, t, r)`
- `movec(pose_via, pose_to, a, v, r, mode)`
- `modbus_add_signal(IP, slave_number, signal_address, si...`
- `modbus_delete_signal(signal_name)`
- `modbus_get_signal_status(signal_name, is_secondary_pro...`
- `modbus_send_custom_command(IP, slave_number, function...`
- `modbus_set_digital_input_action(signal_name, action)`
- `modbus_set_output_register(signal_name, register_value...`

Two curved arrows point from the autocomplete menu to the images of the robots. A blue box labeled **LIVE AUTOCOMPLETION** is positioned below the menu.

On the right side of the IDE, there are two images of a robotic arm:

- REAL ROBOT**: A photograph of a physical silver and blue robotic arm.
- VIRTUAL ROBOT**: A 3D simulation of the same robotic arm with red, green, and blue coordinate axes.

The IDE status bar at the bottom shows: `robpod-ws > square.script` | 10:14 CRLF UTF-8 4 spaces Python 3.7 (robpod-ws)

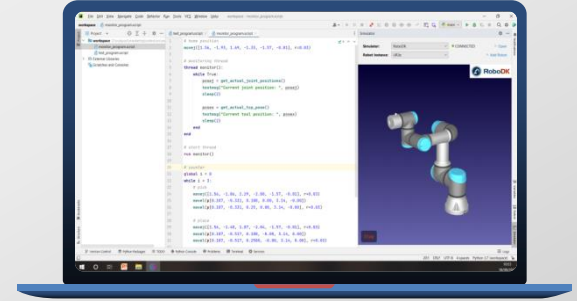


ROBOT

DOWNLOAD files from robot and creates backups.

SYNCHRONIZE multiple files to deploy a whole project on the robot

UPLOAD and transfer files on robot controller.

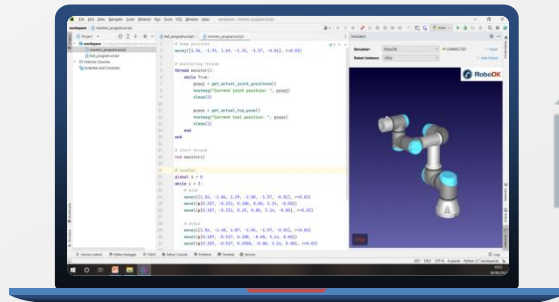


PC



Simulation & Off-line
programming

The same script you develop for the real robot
can be tested on the **simulator**, without any
change or post-processing.



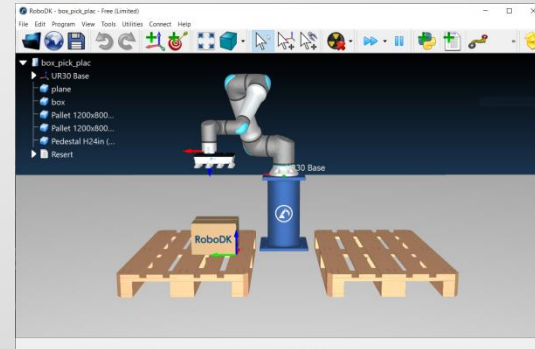
PC

EXECUTE



ROBOT

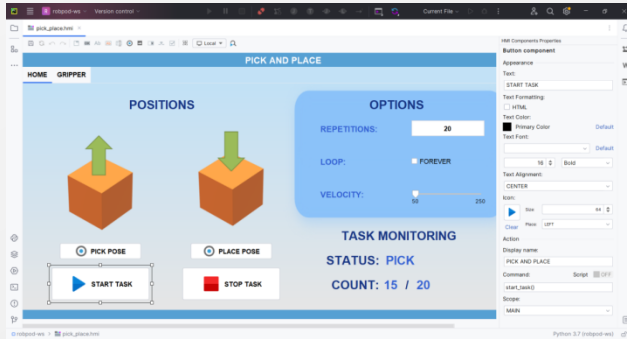
SIMULATE



SIMULATOR

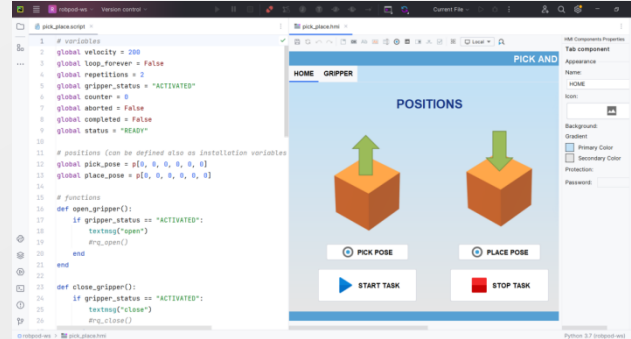
Develop truly collaborative robotics applications with **customized HMI panels** seamlessly integrated with running robot programs.

DESIGN,



Drag and drop UI components to design your custom HMI panel.

LINK,



Link UI components to robot program variables and functions.

RUN!
Deploy the HMI on robot teach pendant or view it remotely.



ROBOT



PC

Robpod HMI Viewer



ROBPOD

COGNITION CONNECTION COLLABORATION