

Instructions for preparing your computer for the workshop

Software

Prerequisites

- Virtual environment with Python (3.9) - can be installed using conda (miniconda is available here: <https://www.anaconda.com/download>)
- Install NiryoStudio for your system¹: <https://niryo.com/resources/download-center/>
 - When you launch the app for the first time, you will be prompted to register a Niryo account. The app will not work without registration.
- Libraries: pyniryo, pydantic, openai, ollama
- Install IDE for python – e.g Visual Studio Code, PyCharm

Note: If you are using conda on Windows, you must add it to the path in the environment variable settings.

Installation instructions for python libraries:

- Create a virtual environment for Python. (for example using conda):

```
conda create -n niryo python=3.9  
conda activate niryo
```

- Install libraries using pip:

```
pip install pyniryo pydantic openai ollama
```

Note: Tested on Ubuntu 24.04 LTS, Windows 11 and Macbook M1 with MacOS version 15.6

How to connect the Niryo robot to a computer

- 1) The robot is connected to the computer via an Ethernet cable (RJ45 connector). Therefore, you need to have an RJ45 port or a USB-C dongle/hub with an RJ45 connector.
- 2) After connecting the Ethernet cable, you must configure the network:

Linux ubuntu

Open Settings → Network → Wired → Profile for ethernet connection connected to the robot → click on site properties → IPv4 → Link Local Only → Apply

¹ version for Ned2 robot

The computer will obtain an IP address in the format 169.254.X.X, and everything should work.

Windows 11

Open network settings → Ethernet → Set IP to manual → 169.254.200.210, Mask: 255.255.255.0

MacOS

If set to DHCP, it should obtain an IP address in the format 169.254.X.X, so it should work immediately after connecting to the robot.

3) Test the connection:

```
ping 169.254.200.200
```