



# haura PORTANORD - cose importanti

🕒 Created	@January 20, 2025 8:54 AM
📁 Class	tirocinio

mac giovi

remote1: masa

remote2: mec

remote3: haura

## Copy to remote1 a file in remote3:

```
scp -o "ProxyJump utente@172.25.0.3" -r root@192.168.12.110:/root/setuphaura  
/destination
```

## Copy to mac giovi a file in remote3:

```
scp -o "ProxyJump masa@155.185.48.231,utente@172.25.0.3" -r ...  
root@192.168.12.110:/root/115/
```

## LOGIN

```
ssh masa@155.185.48.231
```

```
ssh utente@172.25.0.3
```

## PIPELINE FOR CALIBRATION OF AN HAURA

1. Take left and right pictures locally to haura

```
timeout 5 gst-launch-1.0 rtspsrc location=rtsp://192.168.88.20/mainstream !  
rtph265depay ! h265parse ! avdec_h265 ! jpegenc ! filesink location=right.jpg
```

```
timeout 5 gst-launch-1.0 rtspsrc location=rtsp://192.168.88.11/mainstream !  
rtph265depay ! h265parse ! avdec_h265 ! jpegenc ! filesink location=left.jpg
```

And put the two pictures in a folder.

copy the calibs.yaml as well

2. Copy the pictures locally to mac with command "Copy to mac giovi a file in remote3"
3. take map.tif from qgis
4. calibrate the camera with script "findhomography"
5. once you have **projections.yaml** file you can
  - a. upload projections.yaml
  - b. upload map.tif

Into haura with

```
scp -o "ProxyJump masa@155.185.48.231,utente@172.25.0.3" mappa_raster.tif  
root@192.168.12.110:/root/map.tif
```

## OPEN FORWARD

1. INSTALL PYTHON3

```
sudo apt update  
sudo apt install python3 python3-venv python3-pip
```

2. OPEN FORWARD

```
sudo nano /etc/sysctl.conf
```

3. INSTALL MOSQUITTO

```
sudo apt install mosquitto mosquitto-clients
```

4. allow port forward

```
sudo ufw allow 1883
```

```
sudo ufw reload
```

run python code