Step 1: Install UTM
https://github.com/utmapp/UTM/releases/latest/download/UTM.dmg

Step 2: Download ISO file. https://cdimage.ubuntu.com/releases/focal/release/

Server install image

The server install image allows you to install Ubuntu permanently on a computer for use as a server. It will not install a graphical user interface.

64-bit ARM (ARMv8/AArch64) server install image
For 64-bit ARMv8 processors and above.

PowerPC64 Little-Endian server install image
For POWER8 and POWER9 Little-Endian systems, especially the "LC" Linux-only servers.

IBM System z server install image
For IBM System z series mainframes, such as IBM LinuxONE.

download this one

Step 3 : Open UTM and follow these steps (7th step is optional)

Creating a new virtual machine

1   Open UTM and click the "+" button to open the VM creation wizard.

2   Select "Virtualize".

3   Select "Linux".

4   Click "Browse" and select the Ubuntu Server ISO downloaded from the link above. Press "Next" to continue.

5   Pick the amount of RAM and CPU cores you wish to give access to the VM. Press "Next" to continue.

6   Specify the maximum amount of drive space to allocate. Press "Next" to continue.

7   If you have a directory you want to mount in the VM, you can select it here. Alternatively, you can skip this and select the directory later from the VM window's toolbar. The shared directory will be available after installing SPICE tools (see below). Press "Next" to continue.

8   Press "Save" to create the VM and press the Run button to start the VM.

9   Go through the Ubuntu installer. If the reboot fails, you can manually quit the VM, unmount the installer ISO, and start the VM again to boot into your new installation.

OR

follow this video:- ▶ How to Install Ubuntu 20.04 in UTM (M1 Mac)

Step 4 : ROS Noetic installation:-

paste this in the terminal of ubuntu to install ROS

1.

```
wget -c
https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/
ros_install_noetic.sh && chmod +x ./ros_install_noetic.sh &&
./ros_install_noetic.sh
```

2.

```
echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc
source ~/.bashrc
```

Step 5: Pybullet Installation on Ubuntu (after dual boot or setting up virtual machine) :-
▶ PyBullet and OpenCV Installation