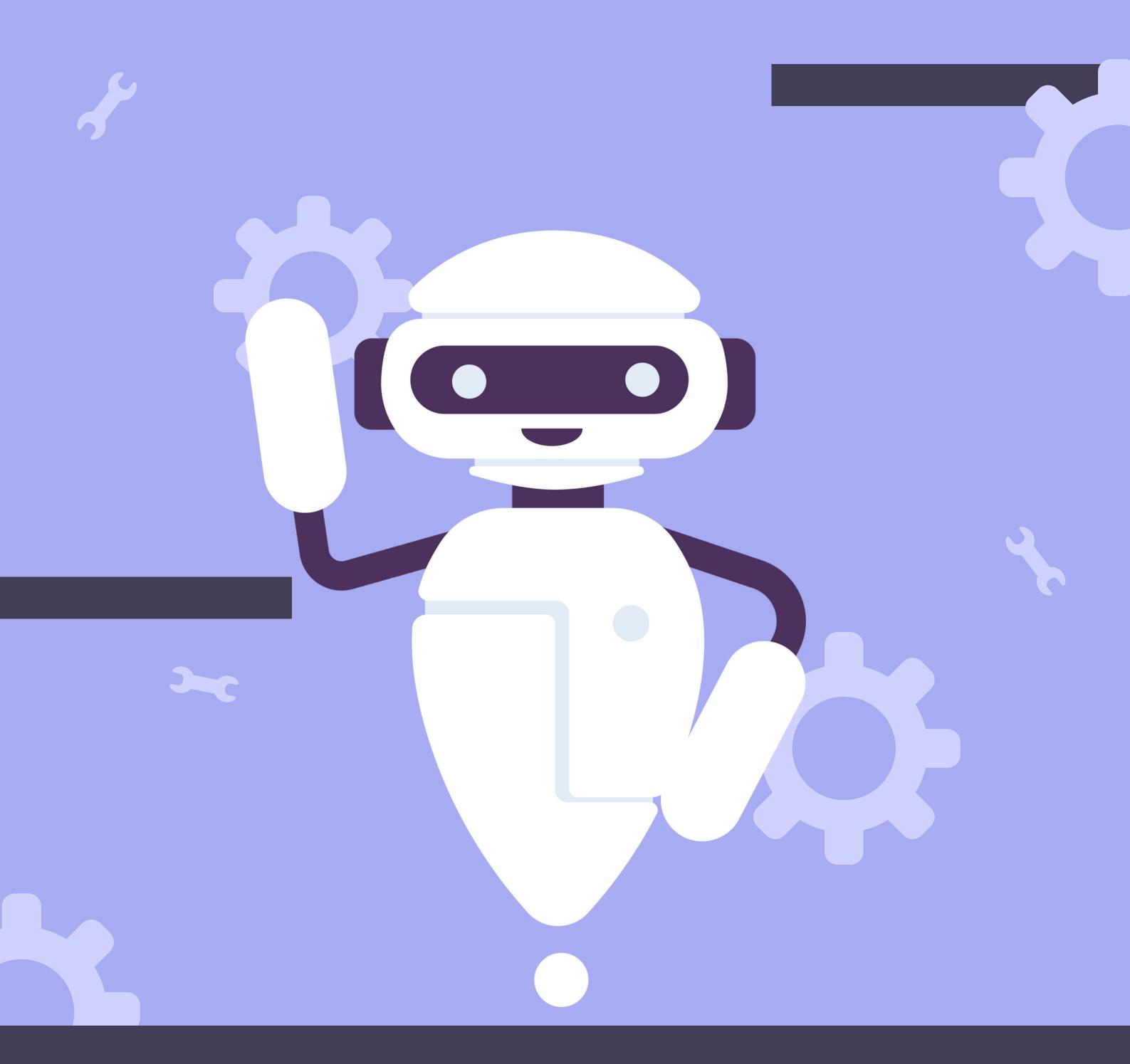
DOWNLOAD ROS



REHAB RAMADA

Smart Methods

تثبیت نظام تشغیل ROS

تثبیت علی المحاکی - تثبیت علی jets on Nano

بعد الأكمال من تنصيب Ubnutu فتح FireFox wep

رابط اوامر تثبیت ros من الرابط(https://s-m.com.sa/ros.txt)



والضغط على قلم البحث عن

ونقوم بنسخ الأوامر من (-https://s) m.com.sa/ros.txt) ثم لصقها في نافذة Terminal ونستمر في نسخ الأوامر ولقصها

> sudo nano ~/.bashrc ثم کتابة الباسوارت

الخطوة الأخير إضافة سطر source) home/wesam/catkin_ws/devel/setup.bash) الانتقال الى نهاية ويجب تغير الاسم الملون بالأحمر بسم نظام Ubnutu

```
🔊 🖃 💷 rehab@rehab-VirtualBox: ~
                         File: /home/rehab/.bashrc
  GNU nano 2.5.3
if [ -f ~/.bash_aliases ]; then
    . ~/.bash_aliases
# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if ! shopt -oq posix; then
 if [ -f /usr/share/bash-completion/bash completion ]; then
    . /usr/share/bash-completion/bash_completion
 elif [ -f /etc/bash_completion ]; then

    /etc/bash_completion

 fi
source /opt/ros/kinetic/setup.bash
source /home/rehab/catkin_ws/devel/setup.bash
```

ctrl + O - enter - ctrl + X

يقوم بتحديث الملف source ~/.bashrc

roslaunch robot_arm_pkg check_motors.launch للبداء في تثبيت الروز

```
// home/rehab/catkin_ws/src/arduino_robot_arm/robot_arm_pkg/launch/check_motors.lau
NODES
    joint_state_publisher_gui (joint_state_publisher_gui/joint_state_publisher_g
ui)
    robot_state_publisher (robot_state_publisher/robot_state_publisher)
    rviz (rviz/rviz)
auto-starting new master
process[master]: started with pid [6306]
ROS_MASTER_URI=http://localhost:11311
setting /run_id to 7426e4ae-05c4-11ed-8d75-080027b19aec
process[rosout-1]: started with pid [6319]
started core service [/rosout]
process[robot_state_publisher-2]: started with pid [6322]
process[rviz-3]: started with pid [6323]
process[joint_state_publisher_gui-4]: started with pid [6338]
[INFO] [1658057701.930323]: Centering
       le: /home/rehab/.ros/log/7426e4ae-05c4-11ed-8d75-080027b19aec/rviz-3*.loc
```

وجهتني مشكلة في التثبيت والحل بسيط قمة بأعاده تشغيل الجهاز واغلاق البرامج وبعد تشغيله من جديد كان كل شيء تحت السيطرة

```
🔊 🗐 📵 rehab@rehab-VirtualBox: ~/installROS
rehab@rehab-VirtualBox:~$ cd installROS
bash: cd: installROS: No such file or directory
rehab@rehab-VirtualBox:~$ cd installROS/
bash: cd: installROS/: No such file or directory
rehab@rehab-VirtualBox:~$ git clone https://github.com/JetsonHacksNano/installRO
Cloning into 'installROS'...
remote: Enumerating objects: 44, done.
remote: Counting objects: 100% (16/16), done.
remote: Compressing objects: 100% (16/16), done.
remote: Total 44 (delta 6), reused 0 (delta 0), pack-reused 28
Unpacking objects: 100% (44/44), done.
Checking connectivity... done.
rehab@rehab-VirtualBox:~$ cd install ROS
bash: cd: install: No such file or directory
rehab@rehab-VirtualBox:~$ cd installROS
rehab@rehab-VirtualBox:~/installROS$ ls
installROS.sh LICENSE README.md setupCatkinWorkspace.sh
rehab@rehab-VirtualBox:~/installROS$ / installROS -h
bash: /: Is a directory
rehab@rehab-VirtualBox:~/installROS$ /installROS -h
bash: /installROS: No such file or directory
rehab@rehab-VirtualBox:~/installROS$ ./installROS -h
```

```
(a) (b) (b) /home/rehab/catkin_ws/src/arduino_robot_arm/robot_arm_pkg/launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_motors.launch/check_
rehab@rehab-VirtualBox:~$ sudo nano ~/.bashrc
[sudo] password for rehab:
rehab@rehab-VirtualBox:~$ source ~/.bashrc
rehab@rehab-VirtualBox:~$ sudo nano ~/.bashrc
rehab@rehab-VirtualBox:~$ source ~/.bashrc
rehab@rehab-VirtualBox:~$ roslaunch robot_arm_pkg check_motors.launch
 ... logging to /home/rehab/.ros/log/1cbf5fe2-178b-11ed-aff3-080027d24025/roslaun
ch-rehab-VirtualBox-2579.log
Checking log directory for disk usage. This may take awhile.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.
started roslaunch server http://rehab-VirtualBox:37275/
SUMMARY
 _____
PARAMETERS
    * /robot_description: <?xml version="1....
   * /rosdistro: kinetic
    * /rosversion: 1.12.17
NODES
```

```
🥽 🖱 🕕 rehab@rehab-VirtualBox: ~
Setting up python-vcstools (0.1.42-1) ...
Setting up python-wstool (0.1.17-1) ...
Setting up python-rosinstall (0.7.8-1) ...
Setting up python-rosinstall-generator (0.1.22-1) ...
Setting up python-secretstorage (2.1.3-1) ...
Processing triggers for libc-bin (2.23-Oubuntu11.2) ...
rehab@rehab-VirtualBox:~$ sudo apt install python-rosdep
Reading package lists... Done
Building dependency tree
Reading state information... Done
python-rosdep is already the newest version (0.21.0-1).
The following packages were automatically installed and are no longer required:
  python-funcsigs python-mock python-pbr
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 166 not upgraded.
rehab@rehab-VirtualBox:~$ sudo rosdep init
Wrote /etc/ros/rosdep/sources.list.d/20-default.list
Recommended: please run
        rosdep update
rehab@rehab-VirtualBox:~$ rosdep update
reading in sources list data from /etc/ros/rosdep/sources.list.d
Hit https://raw.githubusercontent.com/ros/rosdistro/master/rosdep/osx-homebrew.y
```

