

# MiRoCODE Installation and Run for Linux

## Section 1 – Set up Docker on Machine with Terminal

1. Install Docker from <https://docs.docker.com/install/linux/docker-ce/ubuntu/>
2. Follow the instructions for **Install Docker Engine - Community**
3. Search Linux repository for Docker by typing:

```
sudo apt-cache search docker.io
```

```
andy@dutch ~/Downloads $ sudo apt-cache search docker.io
[sudo] password for andy:
docker.io - Linux container runtime
```

4. Install Docker by typing:

```
sudo apt-get install docker.io
```

## OPTIONAL STEP - for Hardware Acceleration (**NVIDIA graphics**)

1. Use **Terminal** to check if Nvidia driver is correctly installed by typing the below in the command line.

```
nvidia-smi
```

- a) If the response is "command not found" you do not have NVIDIA graphics, or the driver is not installed so go to this link: <https://github.com/NVIDIA/nvidia-docker/wiki/Frequently-Asked-Questions#how-do-i-install-the-nvidia-driver>
- b) If the response looks as the below, then you do have NVIDIA graphics and the driver is installed.

```
andy@dutch ~
File Edit View Search Terminal Help
andy@dutch ~ $ nvidia-smi
Tue Aug 27 13:24:33 2019

+-----+
| NVIDIA-SMI 384.130                Driver Version: 384.130          |
+-----+-----+
| GPU   Name           Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf    Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
+-----+-----+
|  0   GeForce GTX 1080    Off      | 00000000:01:00:0 | On          |      N/A           |
| 14%   47C   P8     12W / 200W    |  534MiB /  8110MiB |    0%      Default  |
+-----+-----+

+-----+
| Processes:                       GPU Memory |
| GPU      PID    Type   Process name                               Usage      |
+-----+-----+
|    0     2733    G     /usr/lib/xorg/Xorg                         354MiB    |
|    0     3710    G     cinnamon                                   85MiB    |
|    0     3835    G     ...-token=F135ADCC07E47FDA62F76DA10563D667 | 22MiB    |
|    0     5865    G     ...quest-channel-token=1510534080200926403 | 69MiB    |
+-----+-----+
andy@dutch ~ $
```

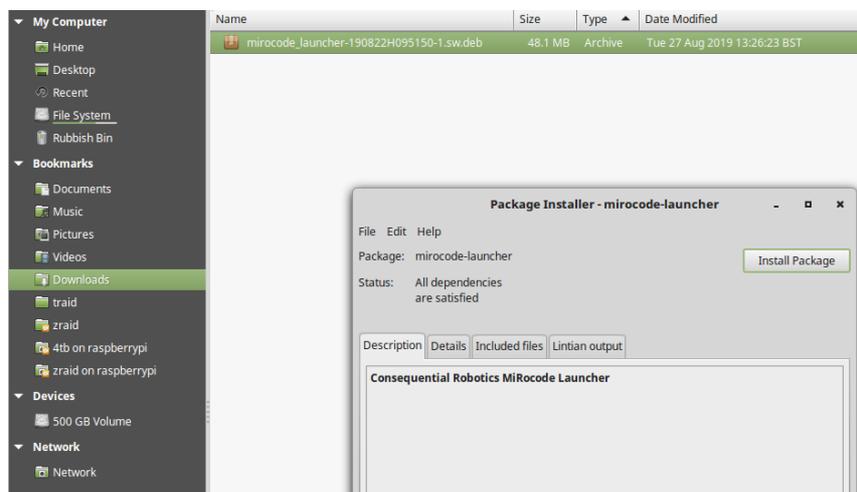
2. Install Nvidia Docker 19.03 version from <https://github.com/NVIDIA/nvidia-docker>
3. Follow the instructions for **Ubuntu 16.04/18.04, Debian Jessie/Stretch/Buster**

## Section 2 - Download MiroCODE

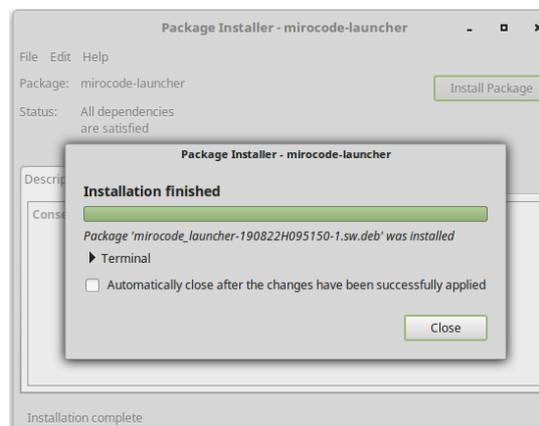
1. Download the MiRoCODE image from going to this link: <http://labs.consequentialrobotics.com/miro-e/software/> - Select the appropriate MiRoCODE files, either **.SW.deb** for standard Linux or **.HW.deb** for Linux Nvidia (if the above Step has been completed).
2. The .deb files will download into your Downloads folder or wherever you specify.



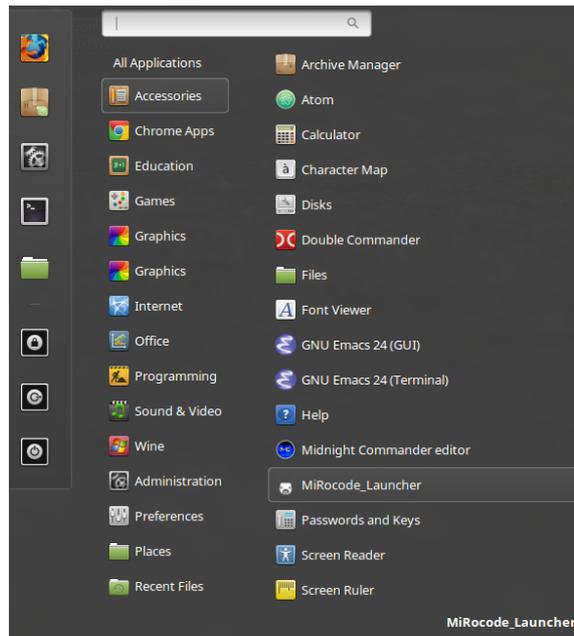
3. Double click the installer presented with package installer and install the package.



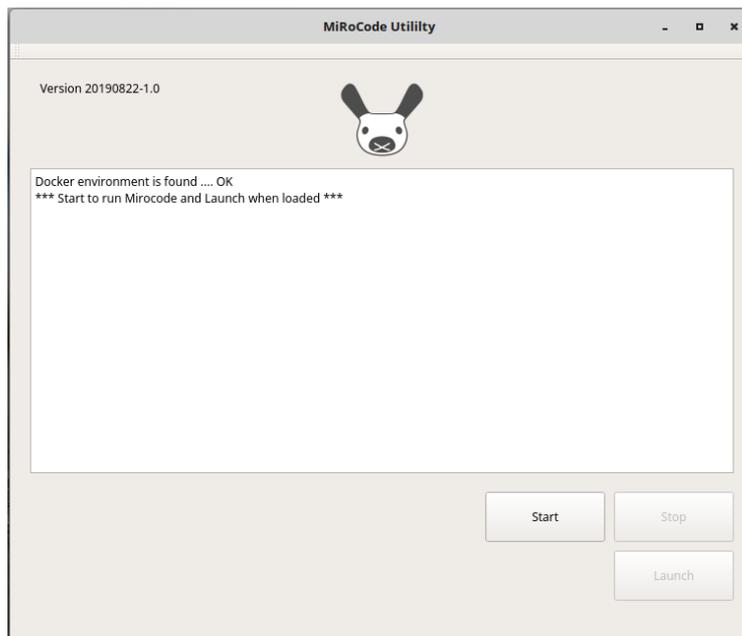
4. Once *mirocode-launcher* is successfully installed, close the windows.



5. Navigate to the Start Menu > Accessories and click **MiRocode\_Launcher**.



6. Press Start and wait until MiRoCODE has downloaded, this may take up to 20 minutes on the first use, and 1-2 minutes on subsequent uses.



7. When ready the Launch button will be enabled.
8. Click **Launch** and your browser will open and display MiRoCODE ready to use.

### Section 3 – Shut down MiRoCODE

1. When you have finished a session, we recommend strongly pressing Stop to stop running the program, this will stop your device running too slowly.