

## 1. Install nodejs and npm

```
sudo apt-get update  
sudo apt install nodejs npm
```

However, the version installed directly with the above command is relatively low. Subsequent errors may be reported during the installation of the jupyterlab plugin. We can check the version with the following command, we must have node version 12.3.0 or higher.

```
node -v  
npm -v
```

## 2. Install n module

We need to use this module to update or specify the version of node installed.

```
npm install -g n
```

Clear the npm cache: **npm cache clean -f**

Install n module: **npm install -g n**

Install the official stable version: **n stable**

Install the latest official version: **n latest**

Install a specified version: **n 11.6.0**

Check the installed node version: **n**

View the current node version: **node -v**

Delete the specified version: **n rm 7.5.0**

Input following command to install latest version node.

```
sudo n latest
```

After installation is complete, input command **node -v** to check version number.

Input following command:

```
sudo n
```

Input following command to restart Jetson NANO.

```
sudo reboot
```

```
o node/15.0.1  
Use up/down arrow keys to select a version, return key to install, d to delete, q to quit
```

```
jetson@jetson-desktop:~$ node -v
v15.0.1
jetson@jetson-desktop:~$ npm -v
7.0.3
```

### 3. Install jupyterlab

3.1 Install some dependent package

(Ignore the warning, execute it for multiple failures)

```
sudo pip3 install jupyter jupyterlab
```

```
sudo jupyter labextension install @jupyter-widgets/jupyterlab-manager
```

```
sudo jupyter labextension install @jupyterlab/statusbar
```

3.2 Generate the corresponding configuration file

```
jupyter lab --generate-config
```

Input notebook password:

```
jupyter notebook password
```

**You must remember this password.**

3.3 Set up boot self-starting jupyterlab, create \_jupyter\_service.py file

Transfer create\_jupyter\_service.py file into Jetson NANO system by WinSCP.

```
python3 create_jupyter_service.py
```

Move the generated service file to the system service.

```
sudo mv nano_jupyter.service /etc/systemd/system/nano_jupyter.service
```

Enable this service.

```
sudo systemctl enable nano_jupyter.service
```

Start up this service.

```
sudo systemctl start nano_jupyter.service
```

### 4. Install jetcam

Input following command:

```
git clone https://github.com/NVIDIA-AI-IOT/jetcam
```

```
cd jetcam
```

```
sudo python3 setup.py install
```

More Detail, please check <https://github.com/NVIDIA-AI-IOT/jetcam>