

# ArrayFire 3.7 – Jetson

## Installation d'ArrayFire

**Recompiler cmake 3.15.3 et boost 1.7.1 pour arm64 :**

1) Extraire cmake-3.15.3.tar.gz sous la racine (~)

```
cd ~/cmake-3.15.3
```

```
./bootstrap
```

```
make -j4
```

```
sudo make install
```

2) Extraire boost\_1\_71\_0.tar.gz sous la racine (~)

```
cd ~/boost_1_71_0
```

```
./bootstrap.sh
```

```
sudo ./b2 install
```

**Installer les dépendances générales :**

```
sudo apt install -y build-essential git libfreeimage3  
libfreeimage-dev cmake-curses-gui
```

**Installer les dépendances CPU :**

```
# Using OpenBLAS
```

```
sudo apt install libopenblas-dev libfftw3-dev liblapacke-dev
```

```
# Using ATLAS
```

```
sudo apt install libatlas3-base libatlas-base-dev libfftw3-dev
```

```
liblapack-dev
```

**Installer les dépendances Forge :**

```
sudo apt install -y libfontconfig1-dev libglfw3-dev libglm-dev
```

## **Télécharger Arrayfire et Forge :**

```
cd ~
git clone -b master -recursive
https://github.com/arrayfire/arrayfire.git
git clone https://github.com/arrayfire/forge.git
```

## **Ajouter les 2 lignes suivantes en fin de fichier .bashrc :**

```
export PATH=./:$PATH
export LD_LIBRARY_PATH=/usr/local/lib:$LD_LIBRARY_PATH
```

## **Construire & Installer Forge :**

```
cd ~/forge
mkdir build && cd build
cmake .. -DCMAKE_BUILD_TYPE=Release -DBUILD_CPU=ON -
DBUILD_CUDA=ON -DBUILD_OPENCL=OFF
make -j4
sudo make install
```

## **Construire & Installer Arrayfire (les fichiers sont installés par défaut sous /usr/local/include et /usr/local/lib) :**

```
cd ~/arrayfire
mkdir build && cd build
cmake .. -DCMAKE_BUILD_TYPE=Release -DBUILD_CPU=ON -
DBUILD_CUDA=ON -DBUILD_OPENCL=OFF
make -j4
sudo make install
```